THE
MECHANISM OF EXCHANGE

A HANDBOOK OF ECONOMICS
(CURRENCY, BANKING AND FOREIGN EXCHANGE)

BY

JOHN A. TODD, M.A. (Oxon.), B.L. (Glasgow)
PRINCIPAL OF THE CITY SCHOOL OF COMMERCE, LIVERPOOL

FIFTH EDITION

OXFORD UNIVERSITY PRESS
LONDON : HUMPHREY MILFORD
1939

OXFORD UNIVERSITY PRESS
AMEN HOUSE, E.C. 4
London Edinburgh Glasgow New York
Toronto Melbourne Capetown Bombay
Calcutta Madras
HUMPHREY MILFORD
PUBLISHER TO THE UNIVERSITY

First Edition	*May* 1917
Second Edition	*July* 1919
(2nd Impression) revised	*Jan.* 1922
(3rd Impression) reissue	*May* 1924
(4th Impression)	*October* 1925
Third Edition	*September* 1927
Fourth Edition	*October* 1933
Fifth Edition	*September* 1939

PREFACE TO THE FIFTH EDITION

THOUGH it is now more than twenty years after the Armistice it is still impossible to describe the English monetary system except after the manner of the house that Jack built. There was first the pre-war system, the history of which carries us back to the time of the Saxon King Offa (A.D. 760), though the modern system dates from 1816. Then came the Great War, which upset the established system in many ways. When that was over the idea of the authorities seemed at first to be to get back to the pre-war system as quickly and as completely as possible. By 1925, when we returned to the gold standard at the old rate, it looked as if they had almost succeeded in doing so, though this was followed by one important modification of the bank-note system in 1928. But the Wall Street crash of 1929 upset the whole system again and in 1931 brought about a new crisis which drove us off the gold standard once more. By 1936 practically the whole world had followed our example, but gradually since the establishment of the Exchange Equalization Fund in 1932 we have been building up an entirely new system which might be described as a managed gold standard. Whether we shall ever go back to a fixed gold standard is still an open question.

It is the English way never to undertake the reform of an old-established institution by making a clean sweep of the old system and laying down the lines of the new on a simple and logical structure, but rather to adapt the old system by making the minimum necessary alteration here and there, which will let the old evolve into the new. From the point of view of the writer of a text-book, however, the disadvantage of this method is that one must go on describing every stage of the old system in detail so as to show where the patches fitted in, while at the same time making it clear that the result is really an entirely new system. The final object of the description is of course to show how the new system works, but in the present state of development it is also necessary to consider what further evolution is possible or necessary before we can arrive at a permanent system which will be anything like as definite as the old. Only one thing is certain. We can never go back now to the old pre-war system in its entirety. Shall we out of the present transition stage evolve something which will be better ?

For the first time since their original publication in 1917 and 1925 respectively, new editions of this book and of its other half *The Science of Prices* happen to be called for at the same time. The opportunity has therefore been taken to remove the two chapters on 'The History of Exchange' and 'Marketing' and also the sections dealing with the theory of International Trade and the Balance of Trade from this book to the other. This leaves room for the considerable amount of new matter which is required in this edition to bring the record of events down to date from 1933 when the previous edition broke off. For the same reason certain sections of the War and immediate post-war periods which are now merely history and not essential to the understanding of the present position have been omitted, as well as certain of the statistical tables which are in a similar position. Otherwise the Statistical Appendix has been revised and brought down to date.

It will be seen therefore that this edition is a very different book from its predecessor, and the whole book has accordingly been reset.

JOHN A. TODD.

CITY SCHOOL OF COMMERCE,
LIVERPOOL, *June* 1939.

CONTENTS

CHAPTER I. INTRODUCTORY 1

The meaning of exchange value.—Money the means of exchange.—Prices and value.—Possible effect of the mechanism of exchange upon values.

CHAPTER II. THE FUNCTIONS OF MONEY . . 5

The functions of money.—Its evolution.—How the precious metals came to be chosen as money.—Their advantages.—Development of the modern form of coinage.

CHAPTER III. THE QUANTITY THEORY OF MONEY 15

The value of money is its purchasing power.—Quantity theory of money.—Variations of its purchasing power or general level of prices.—Index Numbers.—The meaning of Money.—Metallic money with full intrinsic value, Token money, Paper money, Bankers' money and the Credit system.

CHAPTER IV. THE QUALITIES OF GOOD COINAGE 27

Intrinsic value and legal tender value.—Right, weak, and strong money.—Free mint and mint price.—Gratuitous coinage.—Brassage and seigniorage.—Gresham's Law.—Token money.

CHAPTER V. BIMETALLISM 41

The meaning of the question and its importance.—Insufficiency of gold alone for the world's currency requirements.—Instability of the value of gold.—Difficulties of national bimetallism.—The Latin Union and its history.—The position of India and America.—Possibilities of international bimetallism.

CHAPTER VI. PAPER MONEY 55

Different kinds of paper money.—Differences between paper and metallic money.—Limits of issue of paper money.—Signs of over issue.—War paper currencies.

CHAPTER VII. THE CREDIT SYSTEM 63

A system of deferred payment and of doing money's work without the use of currency.—The functions of a bank.—The Clearing House.—Deposits and discounts.—Bank notes contrasted with (*a*) bills of exchange and (*b*) inconvertible paper money.—Assets and liabilities of a bank.—Reserves.

CHAPTER VIII. THE ENGLISH BANKING SYSTEM

A. Before the War 77

The Bank of England.—The Other Banks.—Lombard Street.—Where they got their money and what they did with it.—The Bank Charter Act, 1844.—The Issue Department of the Bank of England.—Regulation of bank note issues in other countries.—The Banking Department.—The Weekly Return.—The Reserve.

B. Since 1914 98

British banks and foreign business.—Clearing Banks' statistics.—Window dressing —Amalgamations.—Authorized Issue.—Currency notes.—Discount market.

CHAPTER IX. THE RATE OF EXCHANGE . . . 103

International trade a return to the system of barter.—The law of the balance of trade.—Foreign bills and the rate of exchange.—Course of Exchange.—Variation of the rate of exchange.—Its effects and its limits.—Gold points.—The cause of the foreign drain.

CHAPTER X. A FINANCIAL CRISIS

A. Before the War 111

The protection of the Reserve.—Raising the Bank Rate.—Its effect on the foreign drain and on the home money market.—Course of a crisis.—Suspension of the Bank Act.

B. The Crisis of July–August, 1914 . . . 116

A pre-war crisis.—No foreign remittances.—Effect on the Accepting Houses, Discount Houses, Stock Exchange, and the banks.—Foreign exchanges.—Currency and gold.—The Bank Holiday.—Moratoria.—Treasury notes.—Marine insurance.—Prices.—Food panic.—Relief measures.

CHAPTER XI. THE BALANCE OF TRADE . . . 133

Effect of the War upon the world's trade, and the balance of British trade; value and volume statistics.—War materials.—New orientation of our foreign trade; changing debtors and creditors.—Invisible exports and imports.—Effect on the foreign exchanges.—Pegging.

CHAPTER XII. THE TEST OF THE QUANTITY THEORY

A. Before the War 139

Was it true before the War?—The facts of the gold supply and prices.—How did it work?—Money of all kinds and credit.—The gold control of credit.

B. During the War 143

The rise of prices; various theories.—Paper money.—Credit inflation.—Pyramiding of deposits.—Ways and Means Advances.—The real meaning of war inflation.

C. Post-war Boom and Deflation 155

Prices after the War.—Armistice slump.—Post-war boom.—Deflation.

CHAPTER XIII. POST-WAR RECONSTRUCTION, 1918–28 163

Cunliffe Committee.—Currency notes.—Bank notes.—The gold standard.—Cost of production of gold.—Silver.—Foreign exchanges.—Purchasing power parity theory.—Balance of trade and indebtedness.—Reparations and inter-allied debts —Currency note issue.—The Young Plan and the Bank for International Settlements.

CHAPTER XIV. THE AFTERMATH OF THE WAR, 1929–31 187

The American boom and crash.—Fall of prices.—German difficulties.—England driven off the gold standard.—Causes of the fall of prices, alleged shortage of gold, credit facilities, currency.—Loss of confidence.

CHAPTER XV. OFF THE GOLD STANDARD, 1931–36 . 207

Effects: (*a*) on England, prices and the rate of exchange, the balance of trade. (*b*) On other countries.—Continent.—Egypt and India.—America; reflation.—War debts and reparations.—Exchange Equalization Fund.—U.S. banking crisis, America goes off gold, Devaluation, the New Deal.—Breakdown of the Gold Bloc.—Tripartite Agreement.—Cheap money.—Open Market purchases.

CHAPTER XVI. TOWARDS A NEW GOLD STANDARD ? 227

The Tripartite Agreement.—The E.E.F. and the Issue Department.—Rearmament.—Rise of prices.—The Gold Scare.—Further French devaluation.—A new depression from America.—Germany, Austria, and Czechoslovakia.—The War Scare.—Defence of sterling.—Confidence and credit.—A managed credit system.

STATISTICAL APPENDIX

TABLE

I. World's Production of Gold and Silver from 1493 . 245
II. World's Gold Production by Countries from 1929 . 246
III. Gold Holdings of Various Countries from 1913 . . 247
IV. Average Price of Silver from 1870 248
V. Index Numbers of Prices from 1782 . . . 249
VI. Wholesale and Retail Prices from 1914 . . . 250
VII. U.K. Currency in Circulation: (*a*) Bank of England Notes and Currency Notes, 1914–28, (*b*) Bank Notes and Coin from 1921 252
VIII. U.S. Money in Circulation from 1928 . . . 253
IX. London Bankers' Clearing House: (*a*) Annual from 1868, (*b*) Quarterly from 1925 254
X. Banking Statistics of the U.K. from 1900 . . . 256
XI. Weekly Return of the Bank of England, 1914 and 1928 . 258
XII. Bank of England's Weekly Return: (*a*) Quarterly 1914–28, (*b*) from 28th November, 1928 259
XIII. Clearing Banks' Statistics: (*a*) Half yearly 1913–20, (*b*) Quarterly 1919–30, (*c*) Quarterly from 1931 . . 261
XIV. London Course of Exchange. 264
XV. Foreign Trade of the U.K. from 1861 . . . 265
XVI. Volume of British Imports and Exports from 1913 . 266
XVII. U.K. Balance of Trade, Visible and Invisible from 1913 . 268
XVIII. Bank Rate Changes from 1914 269

INDEX. 271

DIAGRAMS:

A. Inflation and Deflation, 1914–26 . . . *facing* 156
B. Currency, Banking, and Prices from 1927 . . ,, 194
C. Clearing Banks' position from 1919 . . . ,, 202

CHAPTER I

INTRODUCTORY

The meaning of exchange value.—Money the means of exchange.—Prices and value.—Possible effect of the mechanism of exchange upon values.

THE various economic problems dealt with in this book are comprised under one general heading, the Mechanism of Exchange. Economics may be defined (somewhat elliptically[1]) as the science of exchange values or the science of prices, which are exchange values expressed in terms of money. Money in the widest sense of the word, including metallic money, paper money, bankers' money, and the credit system, is the means of exchange. The essential purpose of exchange is the determination of the relative values of different commodities to each other, and these values are for convenience expressed in terms of money as prices. The use of money, however, as a means of exchange must not be allowed to obscure the fact that the real value of any commodity is not the amount of money for which it is exchanged, that is to say its price, but the amount of other commodities which can be obtained, now or later on, in exchange for that money. Price is only a means of expressing the relative value of two commodities, by comparing them, not directly with each other, but indirectly through the universal third commodity, money. For instance, it is more convenient in discussing the relative value of a pound of tea and a pound of sugar to say that the one is worth 2*s*. 6*d*. and the other worth 3*d*. than to say that the one is worth ten of the other. Money is therefore the standard of value, the means by which the value of different things is measured against each other, just in the same way as the relative height or weight or age of things is measured, not by comparing them with each other, but by describing each of them in terms of certain accepted standards known as feet, pounds, or years.

---

[1] The full definition, founded on Marshall's, should be 'the science of the motives or notions of value which actuate men in the acquisition and use of wealth'. See *Science of Prices*, chap. i.

But the use of such standards of measurement involves a serious responsibility; the standards must be accurate and uniform, and especially they must be as nearly as possible invariable. It does not matter in the least what the exact standard is, but it must be always and everywhere the same. Thus it does not matter at all what is the exact length of the standard of measurement called one foot, or how many feet it is decided to call one yard. But it is absolutely essential that all foot rules and yard measures should be of exactly the same length and that they should always remain the same length. The whole point about a standard measure is that it must be publicly known and certain, so that when that standard is used in any bargain the buyer knows exactly what he is receiving, and the seller what he is giving.

The application of these requirements to the standard of value, that is to say to money as the measure of values, is not so obvious, but it is just as necessary as in the case of any other standard. In the first place, all coins of the same denomination must be of the same value, otherwise it would never be possible to measure the price paid for an article without knowing which kind of coin was tendered in payment. This is an obvious necessity, but there is another much more difficult test to be applied to the efficiency of money as a measure of value. The value of a perfect money must be the same everywhere and always, and that is a very difficult thing to secure. The real value of money is its purchasing power, the quantity of goods for which a certain quantity of money can be exchanged, and as a matter of fact it is almost impossible to prevent that purchasing power of money varying from one place to another, and especially from one period to another. But such variation is fatal to the perfection of money as a standard of value. It is just as if the builder of a huge bridge used a steel measuring chain which expanded and contracted with the variation of temperature from day to day. Both stone and metal vary greatly with changes of temperature, especially in a climate with extremes of heat and cold such as Egypt or India, and it is necessary in the construction of large engineering works to make the most elaborate calculations to prevent the accuracy of the work being thrown out by these variations.

The difficulty in the case of money is perhaps greater than with any other standard, because it is now known that its value does vary greatly from time to time,[1] and these variations are inevitable under any monetary system which has yet been invented. From 1873 to 1914 the value of money had first risen and then fallen again; during the War and post-war period the cycle was reversed and on a much larger scale; and the results of these movements have been sometimes disastrous and always very inconvenient. For these variations in the general level of prices result in an actual disturbance of the relative values of commodities to each other. Suppose for example that a man sells certain goods to-day for money and lays the money by; but later on he finds it necessary to sell this money again, or in other words to use it in the purchase of other goods. In the meantime the value of money has fallen, that is to say the price of commodities in general has risen, and he cannot now buy so many commodities of any kind with his money as he could have done at the time when he sold his original goods. The effect is to alter the relative value of the goods he sold and the goods he now wishes to buy, for he finds that he gets fewer of the latter for his own than he expected. The relative value of the goods he sold and those he now wishes to buy has been altered by the change in the value or purchasing power of the money which was used as the means of exchange.

Knowing then that such changes in the standard of value may take place, it is necessary that the character of money and its work should be carefully studied so as to find out the nature of money, how it does its work, why these changes in its value take place, and if possible how to modify or prevent them. The mechanism of exchange must be studied in all its forms, for the comparatively simple expedient of using metallic money as the means of exchange has developed into a most complicated system of using all kinds of different things as money, including even pieces of worthless paper, which yet under certain conditions seem to serve the purpose of money extraordinarily well. Finally, a system of credit and banking has been developed which may be described as a system of doing money's work without the use of any form of actual currency at all. All this complicated machinery must be carefully examined to see how it works, and what are its effects on the main purpose of it all, which is the exchange of goods against goods; and this is the connecting thread which will run through the whole argument of the book. It is an attempt to see how all the different forms of money or money substitutes have come into existence, how they are used, and whether they fulfil satisfactorily their main function as a means of expressing the relative value of commodities. Economics is not the science of wealth in the sense that it teaches men only how to make or spend money; it is the science of values, the study of the relative values of all the different commodities and services which men spend their lives in producing and consuming, in rendering and receiving. These and not the money are the real subject-matter of its study. This branch of the science is therefore, in a sense, subsidiary, but it is of the greatest importance and interest. It is the side of economics which deals most directly and exclusively with the problems of the business world, and which therefore appeals most directly and forcibly to the commercial man.

---

[1] See Table V in the Statistical Appendix.

CHAPTER II

THE FUNCTIONS OF MONEY

The functions of money.—Its evolution.—How the precious metals came to be chosen as money.—Their advantages.—Development of the modern form of coinage.

So far money has been referred to in broad terms as the means or medium of exchange. It is necessary now to analyse its functions more carefully:

(1) Money is the means or medium of exchange. It breaks up barter into sale and purchase. Goods instead of being exchanged directly for other goods, are exchanged for money, which again is exchanged for other goods. Money thus becomes the universal third commodity for which all goods are exchanged.

(2) As everything is exchanged for money, money becomes the common measure or common denominator of value. Thus exchange value becomes price, which is simply exchange value expressed in terms of money.

In order to fulfil these two functions properly, the essential quality of money is that it must be universally acceptable, because its value depends on common consent to accept it in payment for goods, that is to say, to give goods in exchange for it. Every one is willing to take money in exchange for his goods because he knows that others will in turn be willing to take the money in exchange for their goods. Hence Walker's[1] definition of money as 'that which passes freely from hand to hand in full payment for goods, in final discharge of indebtedness, being accepted equally without reference to the character or credit of the person tendering it, and without the intention on the part of the person receiving it, himself to consume or enjoy or otherwise use it than by passing it on sooner or later in exchange'.

(3) Money is also the store of value, the standard of deferred

---

[1] *Dict. Pol. Econ.*: 'Money'.

payment or the register of debt. All contracts or obligations implying an undertaking to be fulfilled at a future time are usually expressed in money values though in reality they relate to goods or things of value. Thus if a manufacturer borrows raw materials to make into goods, and is unable to pay for them until later on, his obligation is not to return an equal quantity of raw materials at the period fixed, but is expressed in terms of an obligation to pay a certain sum of money, based on the present money value of the raw materials borrowed.

The one quality essential to enable money to fulfil this function properly is stability of value. If the value of the money changes in any way during the period of the loan, it is obvious that either the creditor or the debtor will be prejudiced by the change.

The process of evolution by which men have gradually come to choose what are known as the precious metals to fulfil these functions of money is most interesting, not only as a piece of the history of the development of civilization, but also as showing how the character and functions of money itself have been developed. Thus the use of money as merely a means of exchange is comparatively a late development. At first the thing accepted in exchange was necessarily some commodity which possessed intrinsic value, though it might happen that it was something for which the receiver had no personal use at the time. But he knew that he would want it later on, or that when he wanted something else he would easily be able to exchange it for the things he wanted, because this particular commodity which he had received in the first exchange was generally desired by other people. Thus one can imagine a total abstainer being willing to accept payment of his goods in bottles of whisky, for which he has no use himself, because he knows that when he comes to require other goods, the whisky commands a certain value in the eyes of most men which will make them accept it in exchange. But one could hardly imagine the use of such a means of exchange in a community of total abstainers. The idea of regarding the medium of exchange as only a means to an end, and therefore not requiring any intrinsic value in itself, as long as people even by mere convention are willing to accept it because every one else is willing to do so, is the highest development of the modern use of money, and is the basis of the theory of the value of paper money and other forms of money which are in themselves entirely worthless.

At first, then, men naturally chose for the means of exchange something familiar and generally recognized as useful or desirable in itself. Thus among primitive savages shells would naturally appeal to them as money, because if they did not require to re-exchange them at once, they could in the meantime employ them as ornaments by hanging them round their necks, and so get some use out of them. A similar idea lay at the root of the practice in India of investing spare funds in the purchase of silver bangles and ornaments for the women folk. The same idea may be recognized in the purchase of diamonds in the west. The money is put to a good use in the meantime, and it is there immediately convertible into other forms of goods when necessity arises. Instead of getting interest on it from the bank, one gets the use of it in the form of ornaments to be admired in daily use.

Among early nomadic tribes cattle, sheep, and other animals were a natural form of means of exchange because they were universally desirable, and also for another reason because they were self-portable as it were; when the tribe moved from place to place the 'living money' moved with them, and even served to carry their other forms of movable wealth, their various goods and chattels. Many other things have been recorded as the accepted means of exchange, such as rice in parts of India, cacao among the aboriginal Mexicans, oil in the Ionian Islands, rock salt in Abyssinia, wampum money in the early days in New England, tobacco in Virginia and Maryland, tea blocks at the old Russian fairs, dates among the tribes of

Northern Africa, beaver and sealskins in Arctic regions, and so on, all of them being articles which in the first place possessed intrinsic value. It was for the same reason that metals were first employed as the means of exchange, for metals were at first among the most precious things available to semi-civilized races. The early use of copper in Egypt, for example, which it is said was indeed the very mainspring of the rise of the earliest Egyptian civilization, would naturally suggest the use of copper articles or ingots as a most convenient medium of exchange, a commodity always desirable and of great use in itself. From these early days the choice of metals as money has become universal, the only change being that as the baser metals, so called, became more common, the choice has gradually risen to those metals of higher value which have come to be known exclusively as the 'precious' metals, namely, gold and silver. It must be remembered, however, that these are not by any means the most precious metals, and it is therefore necessary to consider why they should have come to be so universally adopted as the best material for coinage.

Their first advantage lies in the fact of their universal desirability, which is due to their intrinsic beauty, and the multiplicity of their possible uses as ornaments and otherwise. But another reason for their value is their comparative scarcity, and an interesting way of realizing this is suggested by considering whether, setting aside their modern relative value, gold is really any more beautiful or more desirable in any way than silver. As a matter of fact it is doubtful whether gold always was more valuable in men's eyes than silver, and it is easy to believe that in a country like Southern India, where in the old days gold was comparatively plentiful but there was no native supply of silver, a traveller arriving with a stock of silver for sale would easily have been able to obtain more than an equal quantity of gold in exchange for it. But in modern times the world's supply of silver is so much greater than that of gold,[1] and the cost of production of silver is so much less than that of gold, that gold has without any difficulty achieved the higher position, and is likely to retain it. But another aspect of the question is shown by the fact that other metals still more precious than gold have been tried as the basis of metallic money, especially platinum in Russia during the nineteenth century, but without success. What then are the peculiar qualities of gold and silver which have made them so outstandingly desirable as the raw material of the world's money supply? They may be tabulated as follows:

---

[1] See Table I in the Statistical Appendix.

(1) Facility of transport or portability, because they possess large value in proportion to their bulk and weight, hence their value differs little from one place to another, because the cost of carriage is comparatively small. The price of gold therefore is roughly the same all the world over, because if its supply were excessive in one country and deficient in another it would very quickly be carried from the one country to the other. Thus the value of gold at the mine in South Africa is only a comparatively small fraction less than the value of refined gold in London, because the cost of refining it and forwarding it to London is only a trifle compared with its total value. Even silver of course compares very unfavourably with gold in this respect, so much so for example that in most of the United States silver dollars are not in use at all, but are replaced in actual currency by paper dollars. It would be intolerable to have to carry about any large sum in silver.

(2) Durability. Hence the value of gold varies very little from time to time. Gold does not depreciate, e.g. by rusting, though kept for an infinite time. It is therefore very desirable for use as ornaments, and ancient Egyptian ornaments made of gold are in existence to-day which are six thousand years old, and are in almost as perfect condition as the day they were first worn. For the same reason gold and silver are the most desirable forms in which to keep treasure from one age to another, especially gold, which under proper conditions does not even tarnish with keeping.

Durability is very important for another reason. Gold, once it is found is not consumed, like wheat for instance. It remains more or less permanently in existence, though in the case of ornaments and coinage a certain proportion of its weight is gradually lost by wear in use. But on the whole, gold once brought into the world remains available for permanent use, with the result that each new supply is added to the existing stock, and the sum-total is constantly increasing. This has been expressed by saying that the world's supply of gold is a stock not a crop, and this is of the greatest importance in reducing the tendency to fluctuation in value which would result from variations in the supply if that were dependent upon the annual production. If wheat, for example, were used as money its value would vary enormously from year to year, according to the amount of each year's crop. But with gold it is not so; the annual output though now very large is small compared with the accumulated total which remains from all the world's production throughout past ages. The annual production of all the gold-fields in the world before the War was about twenty-two million ounces (troy) of fine gold, of which probably two-thirds went into coinage. But the total stock of gold in existence in the world as coin and bullion was estimated at about five hundred million ounces, so that the annual addition to the stock was less than five per cent. of the total.

(3) Identity of quality. There is no necessity for sampling, grading, or description of the quality of particular lots of gold, as in the case of wheat, cotton, or other goods. All pure gold is the same, and it is only necessary to ascertain the standard of the metal, in other words the proportion of alloy to pure gold (for gold is scarcely ever handled in the absolutely pure state), in order to be able to state its exact value. There is no difference of quality between different samples of gold from different countries. All pure gold is the same.

(4) Difficulty of counterfeiting. Imitations of gold are easily detected by a very simple and infallible test, and the exact

ascertainment of its standard by assaying is comparatively easy.

(5) Gold and silver are very easily handled from the point of view of the mechanical difficulties of producing a good coin. They are easily melted down, beaten, rolled, or drawn out into thick or thin sheets, pieces, or wires. In technical terms they possess great fusibility, ductility, and malleability. They are also almost infinitely divisible. A piece of gold can be beaten out into a layer so thin that it would be blown away by a breath, and this foil may be cut up into the most minute pieces, yet the whole thing can be brought together again and melted down into an ingot of the original weight. Compare this with a diamond, for example, the value of which disappears completely when it is cut up, or with the difficulty of handling harder metals such as platinum. These were found so difficult as coinage material that they finally had to be abandoned even by Russia, who had the advantage of producing platinum in her own country, and made great attempts to introduce its use.

(6) Stability of value. In this respect it will be found that the precious metals are far from perfect as a means of exchange, yet they are probably much better than anything else yet discovered. The comparative scarcity of gold prevents its value being completely demoralized by great discoveries, and even if such were made, it is doubtful whether the cost of production would be very much lower than at present. Of course, if some chemical process of making artificial gold could be discovered which would produce tons of gold out of some inferior substance it would completely destroy the value of the invention by depreciating the value of gold through its superabundance; but it is a striking fact that though nothing in the world's history has led to greater effort from the earliest times than just this search for the philosopher's stone, not the slightest success has rewarded all these efforts. The world is still dependent for its gold supplies upon the hard-won product of the miners in countries which are all distant from civilization and

mostly very inhospitable and the cost of getting it out is high in human life and sacrifice, as well as in mere labour and machinery. The cost of production of gold is therefore likely to remain fairly high; and by one of the peculiar compensations of economics the very fact of an excessive supply of gold serves to some extent to increase the cost of production of further gold, and so tends to check the increase of the supply. To explain this fully involves anticipating the argument of the next chapter, so that it must suffice at the present stage to say that the general effect of an increased supply of gold is to raise the prices of all kinds of commodities throughout the world; this inevitably affects the prices of machinery and human labour and all the other essentials which go to make up the cost of production of more gold and makes it less profitable to produce gold. Thus the increased supply of gold tends to check itself; but this influence is not normally of any great importance, because it only affects the supply of gold and that very slightly. The other influences which affect the value of gold are of much greater weight than its cost of production.

It is again a matter of great historical and social interest to trace the gradual development of the modern form of coined money which is so generally adopted throughout the world, for there is really astonishingly little difference between the chief types of coins in use in all the different countries of the world. Most of them are round and flat, covered with designs or lettering, and with milled edges, except in the case of nickel and copper coins. What is the explanation of the universal adoption of one common form?

At first the precious metals were used in the form of ingots or small pieces of the metal, which had to be assayed and weighed in order to ascertain their value, a very cumbersome process. Then the practice grew, probably among merchants travelling about the then known world from fair to fair, of making their ingots of a fixed standard of fineness, and putting private marks upon them. Those who knew the merchant's mark and had confidence in him, only required to weigh the ingot; they could take its standard for granted. It is interesting to note that in many cases these primitive coins bore a distinct resemblance to certain articles or commodities which had formerly been in customary use as means of exchange. Thus we find traces of small images of oxen in gold apparently in use as means of exchange in Egypt, and in China there were knife coins, which recalled the previous use of knives as the medium of exchange. It is hardly possible to draw any hard-and-fast line between these primitive ancestors of the idea of coinage and the first of what would be called coins in the modern sense of the word, for the process was not one of invention so much as of evolution. The small bean-shaped ingots, bearing one or more punch marks in the side, which were in use among the Lydian kings as early as 700 B.C. and probably also in China about the same time, are just the last stage before the emergence of the real coin. The first coins in the modern sense of the word were probably the early Greek coins such as those used by the Greek merchants in Naukratis in Egypt in the seventh century B.C. These were round and flat, and bore representations or symbols of the gods in high relief upon both sides. The later Greek coins in Egypt, especially those which bore the head of Alexander the Great, though these were not issued till after his death, were of extraordinary beauty, and the whole coinage of the Greek and Roman periods in Egypt provides an epitome of the history of the various rulers of the country in those days, Greek and Roman. Gradually they were working up to the modern form of the coin, and indeed the only thing they did not use in their coinage, which may fairly be claimed as a modern invention, was the milled edge. Their coins had a bevelled edge which served the same purpose; it enabled any one handling the coin to see at a glance whether it had been much worn, or had been clipped or interfered with in any way. For that is the whole secret of the modern coin; its object is to make it impossible to subtract anything from the metal content of the coin without the fact being immediately patent. That is why the coin is covered with designs over almost the entire surface of both sides, and the edge milled; the least attempt to scrape or rub off any of the metal must interfere with the design or the milling and be shown up at once.

The final stage in the history of coinage is its adoption by the government as its exclusive business, for coinage has from very early times been regarded as the privilege of the government. Thus the government steps in and takes over the making of the coins, marks them with its own mark, generally the portrait or superscription of the sovereign, and fixes the weight and standard of fineness of the gold contained in the coin, at the same time fixing the value of the coin accordingly, and making it legal tender, that is to say, making its acceptance compulsory.

Hence Jevons's definition of a coin is *An ingot of which the weight and fineness are guaranteed by the government, and certified by the integrity of designs impressed upon the surface of the metal.* Its universal acceptability is now based upon the order of the government, not upon the mere consent of the people to accept it, though that was originally based upon the intrinsic value of the coin. But the government has merely set its seal upon the convention already established by custom, and it remains to be seen later on whether the sanction of the government has in any way altered the real value or authority of the coin.

CHAPTER III

THE QUANTITY THEORY OF MONEY

The value of money is its purchasing power.—Quantity theory of money.—Variations of its purchasing power or general level of prices.—Index Numbers.—The meaning of Money.—Metallic money with full intrinsic value, Token money, Paper money, Bankers' money and the Credit system.

BEFORE going on to deal more fully with the qualities and requirements of metallic coinage, and how it fulfils the functions of money, it is necessary to consider certain general questions affecting the position of money as the result of these different functions, especially the second, the common measure or common denominator of values. If, as already explained in previous chapters, all goods are, under a 'money economy' as it is called, exchanged not directly for each other but in the first place for money, it is natural to expect that some relation will be set up between the total amount of goods in existence at any given time which must be exchanged for money, and the total amount of that money which is available at the time to carry out the necessary exchanges. If there is a certain quantity of goods which must be sold for money, and there is only a certain amount of money available to buy them with, then obviously the price of the goods, that is to say the amount of money obtainable for each commodity, will depend on the relation between the amount of money and the quantity of commodities. If there is plenty of money and not very many of the goods, each commodity will exchange for a large quantity of money, in other words it will fetch a high price; but if there is little money and a great many goods the price of the goods will be very low. This is no new theory, but simply another application of the ordinary theory of value, namely, that the value of anything depends on the quantity of other things one can get in exchange for it, which depends as a rule on the relative quantity of the two commodities awaiting exchange. Obviously the same rule ought to apply to the case of exchange between commodities in general and the one commodity for which they are all exchanged, namely money. The value of money then, like that of everything else, should depend on the amount of it, or on supply and demand.

In the first place, however, it is necessary to make clear what is meant by the value of money. The value of any other commodity is expressed by its price, which is its exchange value in terms of money. The price of course is not its real value, but merely a method of expressing its value in terms easily understood and comparable with those of other commodities. But obviously the value of money cannot be so expressed. One cannot express the exchange value of anything in terms of itself. The price of money—its exchange value expressed in terms of money—is an absurdity, which conveys nothing at all. To find out the value of money one must therefore do as in the case of other commodities, go behind the price which is merely the expression of their value, to the real value behind that price. The real value of any commodity is the quantity of other goods for which it can be exchanged. So it is with money: the value of money is the quantity of other commodities for which it can be exchanged, but as all other commodities can be exchanged for money, it is more convenient to say that the value of money is its purchasing power. Now the purchasing power of money obviously depends upon the general level of prices; if prices of all commodities are high it means that a certain amount of money will not go so far in the market as it would if prices were lower. What then is it that regulates the general level of prices, and so controls the purchasing power of money?

As already stated, the value of money is like everything else in that it depends on the supply and demand. The supply of money consists in the first place of the quantity of metallic coinage which is in circulation as the medium of exchange.

It will be seen shortly that that is by no means a complete definition of the money supply, but it may serve the purpose in the meantime. On the other hand, the demand for money is only measurable by the number and value of the exchanges which have to be made of goods for their prices. Obviously this depends primarily on the quantity of the goods concerned, and so it may be generally stated in the meantime that the demand for money depends on the quantity of commodities produced which require to be exchanged for money. Putting these two together we arrive at the definite statement of what is known as the Quantity Theory of Money that *the general level of prices depends on the amount of money in effective use; it varies with the relation or proportion between the total amount of money (of every kind) and the total amount of goods and services which must be exchanged for that money.*

Notice next that theoretically it does not make any difference to any one whether the general level of prices is high or low. Money is only a means to an end, the exchange of goods for each other, and theoretically it does not matter how much of the money is used in the double exchange; what really matters is the amount of each commodity exchanged, that is to say, the relative value of the two commodities compared with each other, regardless of the standard of comparison used. Thus if it is necessary to know which of two men is the heavier, it does not matter whether their weights are measured in terms of pounds or kilograms. The unit of weight used will not affect the relative weights of the two men. In the same way it may be said that the general level of prices is of no importance to any one, because it makes no difference in the real values of commodities. A general rise or fall in prices theoretically makes no difference.

It may be well to point out here a very common confusion of terms. It is customary to speak of a general rise in values, when people say that the value of everything is rising. But a rise in the value of everything is a contradiction in terms, because value is only relative, it means that one thing is worth so much more or less of another. If then the value of one thing rises it must mean that the value of something else in respect of that first commodity has fallen. Both cannot rise at the same time. The confusion arises from the fact that the *prices* of two things may both rise; but that does not affect their values in relation to each other, which remain the same. If the one was worth two of the other before, and the prices of both are doubled, the one will still be worth two of the other. What is really meant by those who speak of a general rise in values is only a general rise in prices, which is not the same thing at all. A general rise in prices means that the value of everything *except one* has risen. That one is money. It means that the value of money, which is its purchasing power, has fallen, while the value of all other commodities in terms of money, which is their price, has risen. A general rise in prices means that the amount of money for which other commodities can be exchanged has risen. One gets fewer commodities now for the same amount of money: in other words, the value of money has fallen.

Theoretically therefore the value of money makes no difference to any one, because it does not matter to the world whether the general level of prices is high or low; but what does matter is the process of rising or falling of the general level of prices, that is to say, the change from one general level of prices to another. Theoretically again even this should not matter if all prices rose or fell simultaneously and proportionately all round, because no one would be any the worse or the better. But that is just what they never do. Owing to various causes, which may be summed up in the term economic friction, there are always some people who suffer in a period of transition because they are less able to defend their economic position. It takes time to make changes, existing contracts must be carried out till they expire, customary prices and rates of wages are very slow to change, even when it is clear that other things are changing, and the result is that there are always certain classes who tend either to gain or lose by a change in the general level of prices. For example, such a change affects the relative positions of debtor and creditor, because it means a change in the value of money during the period of the loan. If a manufacturer borrows £1,000 to put into his business to be repaid ten years later, the only thing he can do with the money is to buy with it something which he requires for his business, say raw materials, and these are in due course manufactured and sold as finished goods, for which he receives a certain price. At the end of the ten years all prices have risen, including those of the manufacturer's commodities. As the time for repayment approaches he must sell £1,000 worth of his goods to pay his debt, but owing to the rise of prices he will not require to sell so many goods now as he would have sold for £1,000 ten years ago. Fewer goods will therefore pay his debt now than he was able to make out of the original sum borrowed. He has gained by the rise of prices, because the value of the money repaid is lower than the value borrowed, though the sum is the same. The value of money has fallen. When prices fall the position, of course, is just reversed. Thus rising prices are good for debtors, and bad for creditors, and falling prices *vice versa*. In the same way the change in the purchasing power of money obviously affects all people with fixed incomes, or those whose rate of remuneration is fixed by custom and is slow to change. Thus the wages of the workers and the salaries of the middle and professional classes are very slow to move in times of changing values, and these classes gain greatly by falling general prices and lose by rising prices. Their real income moves in proportion to the rise or fall of prices in general, but in the opposite direction. This, for example, was very seriously felt by all classes owing to the rapid rise of prices during and after the War. In England in April 1920, a pound would only buy as much as could have been bought for about 6*s*. 2*d*. in July, 1914, the wholesale Index Number being 325 against 100 at the former date (see Table VI *b*).

What matters, then, is not the actual position of prices, but the movement up or down of the general level of prices, and in modern times great attention has been paid to evolving methods of calculating the rise or fall in the general level of prices. For obviously it is not easy to say how the general level of prices is moving when many items are going up, but some are steady, or perhaps even going down. The method now in use is known as that of Index Numbers. A large number of commodities in general use being selected, the price of a certain quantity of a particular quality of each commodity is ascertained. Later on, say at intervals of a month or a year, the price of the same quantity of the same quality of each of the commodities is again taken, and the new figure in each case is compared with that formerly recorded. The difference is calculated as a percentage, and the total of these percentages indicates the movement of the general level of prices. There are of course many different methods of calculating index numbers, and many intricate points of detail to be considered—for these, reference must be made to a special text-book[1]—but the general method is the same and the results are always very similar. There are three main Index Numbers of wholesale prices much used in England, namely Sauerbeck's, continued in the *Statist*; that of the *Economist*, published monthly; and the Government Index Number, which is prepared by the Board of Trade. It is interesting to note the general effect indicated by them all, as shown by Table V. Since 1873, for example, they provide illustrations of both a great fall and a great rise in the general level of prices. From 1873 onwards prices fell very rapidly, and on the whole steadily, till about 1896, when a change began which had become very marked even before the War. Thus the Board of Trade Index Number which was 151·9 in 1873 fell to 88·2 in 1896, and then rose again, till in 1913 it was 116·5. From 1914 to 1920 there came the greatest rise in history, but this was followed by an equally dramatic fall, and by 1932 prices were back to about the level of 1913.

---

[1] e.g. Layton's *Introduction to the Study of Prices*, Appendix A.

Of the two evils of falling and rising prices the former used to be considered the worse, because a general fall of prices causes great depression of trade, and introduces an undesirable element of uncertainty into the calculations of the manufacturer. On the other hand, a rise of prices while it encourages trade is apt to lead to over-activity, inflation of prices, and speculation which generally ends in a collapse and a financial crisis. Further, the effect of a rise of prices upon the wage-earning classes and generally upon those whose economic position is weak, may be disastrous by cutting down their standard of living.

What is wanted above all things is neither rising nor falling prices, but steadiness of the general level of prices, that is to say stability of the value of money, and that is just where the world's monetary system fell short of perfection even before the War. Herein lies the answer to the question propounded in the first chapter as the main thesis of this book: the system of money prices does, in times of transition from high to low prices or *vice versa*, produce an actual distortion of values through inequality of the rate of movement of prices of different commodities. If one class of prices (and it must be remembered that prices include wages or incomes) is rising rapidly, while another remains steady or rises slowly, then the relative value of these commodities or services is being altered by the changes of our monetary system. The quantity theory of money is, therefore, the essence of the whole question round which this book revolves, viz. the mechanism of exchange and its effect upon values. It becomes necessary then to inquire more fully into the quantity theory and the line of this further inquiry may be indicated as follows: According to the theory the general level of prices depends on the quantity of 'money' in circulation. But there are many different kinds of money in use in the world, and metallic money, especially gold, was even before the War only a very small proportion of the total. It must not be assumed therefore that the quantity of *metallic coinage* in circulation, still less the quantity of one particular coinage, say gold, has any direct and *proportionate* effect on prices. In the first place we have no definite knowledge of the amount of gold coinage in existence in the world. All we can do is to take the totals of certain known stores of gold e.g. in certain banks and State treasuries, and estimate the rest. Again our information as to the world's annual supply of gold is fairly accurate, but we have no very definite information as to how much of that is used for coinage purposes or bank reserves, and how much for other uses, such as gold watches and ornaments; that side of the demand for gold can only be estimated.

But even if we had exact information as to the quantity of all the different metallic coinages in the world we should still be very far from being able to apply the quantity theory with any approach to definiteness, because there are so many other things to be taken into account. Suppose for example that in one place or country, owing to the development of the conveniences of exchange, the concentration of markets, and the habits of the people, the turnover of trade is very much quicker than in another district, so that the same piece of money performs many acts of exchange in the course of a day, passing rapidly from hand to hand. Obviously from the point of view of the quantity theory that will have just the same effect as if there were many pieces of money each of which merely passed from one hand to another and remained in the possession of its second owner all day. This then points to the question of 'rapidity of circulation', which is a factor of great importance in the effective amount of money. Again, there are many different kinds of money, all of which require to be taken into account in discussing the quantity of money. First of all there is the standard coinage of the country, usually gold in most countries before the War, which possesses full intrinsic value, that is to say it would be worth as much at a goldsmith's shop as a piece of bullion as it would in any other shop in exchange for goods.

But there are also many other kinds of money called generically 'token money' which possess much less intrinsic value than their face value, such as silver, nickel (in every country except England), and copper. These as most people know are not worth, as metal, nearly their full legal value as coins, yet they pass current every day at their full face value without question. In other words, it has gradually been realized that full intrinsic value is not essential to the utility of a coin as a means of exchange, if certain other requirements are complied with, and it will be necessary to consider carefully what these requirements are and how far token money can thus take the place of its more intrinsically valuable companions. Still more startling is the fact that in modern civilized communities certain slips of paper which are called paper 'money', though they possess no intrinsic value whatever, do as a matter of fact pass current from hand to hand in exchange for valuable goods. They are currency in fact, or money of a sort, and the question of how they perform this apparent miracle and the conditions of their issue, especially as to their amount must be carefully studied, for obviously if money can be made out of paper to an unlimited extent it is waste of time and trouble to use gold as money, and the amount of gold brought to light in the world every year does not matter at all. Further, bankers and other financial men have gradually brought into use certain ingenious methods of doing money's work without the use of any actual currency at all, e.g. by the use of cheques, bank drafts, bills of exchange, and so on, which are all included in the general term 'bankers' money', and these carry us into the mysterious realm of 'credit which in the modern financial organization of the world means paying our debts by a system of set-off or contra account, without using any currency.

But from the point of view of the quantity theory of money all these different kinds of money or expedients for doing without money must be taken into account as money of one sort or another, and the question comes to be whether, in view of this enormous mass of 'money' other than gold, it really matters much what quantity of *gold* money is in existence at all. What are all these different kinds of 'money'; how do they come to fulfil the requirements of money as the means of exchange, and what is their relation to real money, that is to say, to the full intrinsic value money which in most countries was gold only?

The following is suggested as a classification of 'Money' for future use throughout the text:

I. *Currency.*

  Gold standard money possessing full intrinsic value.

  Token money (silver,[1] nickel, or copper) possessing only partial intrinsic value.

$$\left.\begin{array}{l}\text{Paper money}\\ \text{Bank Notes}\end{array}\right\}\text{possessing no intrinsic value at all.}$$

II. *Credit Instruments*, which are really means of doing money's work without the use of any money at all in the sense of currency.

  Cheques, Bank drafts, Letters of Credit, Bills of Exchange, Promissory Notes, and all other forms of 'Bankers' money' or Credit Papers.

To make the distinction between currency and credit instruments as separate kinds of money, instead of merely regarding the credit system as a means of increasing the rapidity of circulation of money, is of practical value, because it is in accordance with the actual facts of the modern monetary system; and its more general observance might have avoided much of the confusion that has arisen in post-war years in discussions of the quantity of money and its effect on prices.

It must be remembered that the Quantity Theory of Money is an equation which may be stated thus:—

$$\begin{array}{c}\text{The general level}\\ \text{of prices}\end{array} = \frac{\text{The Quantity of Money}}{\begin{array}{c}\text{The volume of exchanges of goods and services}\\ \text{which must be effected by Money.}\end{array}}$$

Both these factors in the equation, the quantity of money and the volume of money's work to be done, are very difficult of ascertainment. The latter depends not only on the quantity of goods produced in the world but also on the number of times these goods must change hands in their progress from the first producer of the raw material to the final consumer, and the volume of services rendered in the conversion of the raw materials into the finished articles as well as in the various stages of transport and merchandising through which the goods pass in the process of manufacture and sale.

---

[1] Silver may be 'standard money'.

But the quantity of 'money' is equally difficult to measure, especially as the great bulk of money's work to-day is done not by gold standard money, but by symbols of various kinds from a shilling (which is intrinsically worth only about 2*d.*) down to a £1 note, which has no intrinsic value at all, while the largest volume of all is done by credit instruments which are pure symbols.

Now if the Quantity Theory of Money means anything at all *in terms of gold* it is essential to arrive at some means of measuring the relation (if any) between the volume of all these symbols and the quantity of gold produced, or the quantity in use either as coinage or as the backing of our currency and credit systems. In the case of currency that relation is easily ascertainable. The volume of token money is strictly controlled by governments, and as long as the country is on the gold standard it is always convertible into standard currency. The volume of notes again is in all countries controlled nowadays by the government, and always with some relation to a known backing of gold. The whole volume of currency is therefore known, and has a more or less fixed relation to gold.

But what of credit instruments? Is their volume related to or controlled by gold, and how? Does the production of gold control the volume of credit facilities, which is nowadays the major factor in the quantity of 'money'? An answer to this question is essential to our continued faith in the Quantity Theory of Money. That theory at first meant that the quantity of *gold* controlled the general level of prices. But nowadays gold plays hardly any direct part in the volume of money. It has gone almost entirely out of use as currency. Its use as the backing of paper currency is fixed and limited. But its importance as the foundation of the international credit system is still very great. Payment in gold of international debts and balances is still frequent, and every nation thinks it desirable to hold a reserve of gold to meet the possible need for such payments. There is therefore some relation between the amount of these gold reserves and the volume of credit facilities available in the country for its own domestic trade, which may affect its internal price level. In effect, therefore, the amount of the world's gold reserves affects the supply of credit instruments and therefore controls the larger and more fluctuating part of the world's supply of money. But the nature of this control of the supply of 'credit' by gold is very complicated and uncertain. The relation between the world's production of gold and the total supply of 'money' is therefore highly complex, but that relation is of fundamental importance to the general level of prices both in the world as a whole and in any particular country. The problem of the Quantity Theory of Money to-day therefore is the problem of the relation between gold and credit.

The writer's insistence on the distinction between currency and credit is therefore founded on the fact that the total amount of currency is small and is completely controlled, while the volume of credit instruments is enormous and its relation to gold is much more complex and uncertain. The plan of this book is therefore to deal first with currency and its control, and then to go on to the far more difficult question of the control of the volume of credit. The question throughout is whether the quantity of money (including currency and credit instruments) is still measurable in terms of gold.

CHAPTER IV

THE QUALITIES OF GOOD COINAGE

Intrinsic value and legal tender value.—Right, weak, and strong money. —Free mint and mint price.—Gratuitous coinage—Brassage and seigniorage.—Gresham's Law.—Token money.

It has been seen in Chapter II that the adoption of money as the universal means of exchange is the result of custom; it requires the gradual development of a general agreement to accept the coins in payment of debts. Then the government steps in, guarantees the weight and standard of the metal contained in the coins, and compels the public to accept them in payment of debt at a certain value, that is to say, it makes the coins legal tender. This raises a new difficulty. The standard coin has now two values, (1) its intrinsic value as a piece of bullion, which depends on the market value of the bullion, and (2) its legal tender value, which is fixed by the government.

These two must always be the same, because if the bullion value is greater than the legal tender value, that is to say, if the coin is strong, it will be melted down or sold by weight as bullion, and the coinage will disappear. If, on the other hand, the coin is weak, that is to say, if its bullion value is less than its legal tender value, then the government is defrauding its subjects by trying to make them accept the coin at a value greater than its real value. The terms 'strong' and 'weak' are preferable to those formerly used, 'heavy' and 'light', because it may happen that the heavier of two coins is actually the weaker on account of the greater proportion of alloy which it contains. The government then must see to it that the standard coins are kept 'right', that is to say, that their bullion values are always equal to their legal tender values, no more and no less. But it is very difficult to do this. For while the weight of a new coinage may be carefully calculated at the time of issue, so that it may be exactly right, yet the bullion value of the metal it contains may change, because the bullion is a commodity which has its market price. This price depends on other considerations besides the demand for coinage, for example, on its use in trade or the arts. Thus the government must either be constantly re-coining and altering the weight of the coinage to suit the changing value of the bullion, which is not practicable; or else some means must be discovered of preventing the fluctuations of the market value of the bullion. This is done by what is called the open or free mint. The government fixes a certain price which it is willing to pay for gold of a certain standard, that is to say, it undertakes to coin any quantity of bullion that the public may bring to the mint into coins at a certain fixed number for a specified weight of gold. For example, until 1925 the English mint would coin any number of ounces (troy) of gold of twenty-two carats standard, that is to say eleven-twelfths fine, into sovereigns at the rate of 1,869 sovereigns for 480 ounces of gold. In other words, the mint price of English standard gold was £3. 17*s.* 10½*d.* per ounce (troy).

It is interesting to notice how this peculiar figure was adopted as the basis of the world's price of gold, for such it had become long before 1914. The explanation goes back to the beginning of the modern history of the English coinage in the seventeenth century. At that time a great change was coming over the opinions of business men and foreign merchants as to the policy to be adopted in regard to the precious metals. In the days before the discovery of America by Columbus the precious metals were becoming increasingly scarce throughout Europe. The supplies had originally come from the East in the times of the Greek and Roman conquests, and these had been gradually depleted by wear and loss until in the period between say the thirteenth and fifteenth centuries every nation in Europe was struggling to obtain and retain for itself a sufficient supply of the coveted bullion. The result was the existence in every country of a mass of legislation prohibiting under the most stringent penalties the export of any of the precious metals; but the frequency of these enactments in itself shows how inefficient they were to prevent the trade. The discovery of the New World, however, with its enormous supplies of silver and gold changed the whole situation, and gradually men's views on the proper method of regulating the movement of bullion between different countries began also to change. When the East India Company received its charter on December 31, 1599, a clause was inserted conferring upon the Company the right to export bullion, and this became one of the chief charges made against the Company in later controversies.

Early in the seventeenth century a strong school arose of men who came to be known as the Mercantilists and who advocated an entirely new view of trade, namely, that the only way to protect the nation's supplies of bullion was to regulate trade in such a way that there would always be a favourable balance of trade, which to them meant an excess of exports. This was looked upon as desirable because it meant that other countries would require to pay for the excess in gold or silver. Thus the Mercantilists, whose views to this day colour the terminology of the foreign exchanges, were in reality not reactionists but advanced reformers who stood for the economic principles of free trade rather than the traditional policy of protection which came later on to be associated with their name. One effect of their arguments was seen in 1663 when England, first of all the world, passed an Act allowing within certain easy limits the free movement of bullion out of the country, and to this, as will be seen later on, was largely due the early supremacy of England in the world's financial affairs. This Act was immediately followed by an entire reconstruction of England's own coinage, which was then in a very bad state. At that time the standard coinage of England, like that of every other country in Europe, was silver, as it had been from the time of the old Saxon silver penny of Offa, King of Mercia in

A.D. 760. The penny contained 24 grains troy (or one pennyweight)[1] of silver 11 oz. 2 dwt. fine and 18 dwt. alloy which made the standard 925/1000, and 240 pence were made out of 1 lb. troy of standard silver. That is why there are to-day 240 pence in a pound. The shilling of twelve pence became the unit in place of the penny in 1601 under Elizabeth's great re-coinage, but the weight of the shilling was only $92\frac{3}{4}$ grains so that 62 were made out of 1 lb. troy of 5,760 grains, hence the standard price of silver became 62*d.* per oz. (62*s.* per lb. of 12 oz.) This old standard of 925/1000 is still the basis of the market quotations of the price of silver.

Under an Act of 1663[2] gold coins were introduced which were officially known as 'Unites' or 'broad' pieces, but soon came to be popularly known as 'Guineas', because they were made from gold brought from the territory of the Guinea Company in West Africa. Forty-four and a half of these new pieces, which were declared to be worth twenty shillings each, were to be made out of a pound troy or twelve ounces of standard or 'Crown' gold, which was to contain twenty-two carats of gold to two of alloy, that is to say it was the modern standard of eleven-twelfths fine. According to this the standard gold would be worth $\frac{£44.\ 10s.}{12} = £3.\ 14s.\ 2d.$ per oz. This fixed price, however, turned out to be much less than the real bullion value of the new coins in comparison with the silver coins, which to make matters worse were very much clipped and worn, and the new coins quickly showed a tendency to disappear from circulation, being melted down or sold for export at their bullion value. To meet this difficulty the price of the guinea was gradually raised until it finally touched thirty shillings.

In 1696, England, under the advice of the philosophers, John

---

[1] Troy measure 24 grains = 1 pennyweight.
20 dwt. = 1 ounce.
12 oz. = 1 lb. = 5,760 grains.

[2] See Dana Horton, *The Silver Pound,* p. 229.

Locke and Isaac Newton, entered upon another great recoinage scheme which for a time righted matters again, and the price of the guinea fell to 21*s.* 6*d.* at which it was officially fixed, thus marking the first step on the part of England (though it was probably unintentional) toward establishing a fixed ratio between the values of gold and silver bullion. But still the price was too high, and in 1717, Sir Isaac Newton being then Master of the Mint, the guinea was reduced to its well-known value of twenty-one shillings, at which it remained as long as it continued to be a part of the English coinage. Incidentally this fixed the modern price of English gold, because if twelve ounces of standard gold were still coined into 44½ of these coins, which were now officially declared to be worth £1. 1*s.* each, then obviously one ounce was worth a twelfth part of 44½ guineas, namely £3. 17*s.* 10½*d.*

This fixed mint price of gold is part of what is meant by the gold standard, but unfortunately that phrase is sometimes used in another sense. When a country is on the gold standard it means in the first place that the standard unit of the coinage, to which all the other coins are related, is a gold coin of a fixed weight and fineness. But the 'standard' of a country's gold means the degree of fineness of the gold coinage, which in England since 1544 has been 22 carat or 11/12ths fine or 916·6 parts in a thousand, the remainder being alloy regarded as worthless.

When a country has an 'effective' gold standard it means that all the various currencies of the country, whether token or paper money, can be exchanged at any time and to any amount for gold coins at the fixed mint price. Sometimes as in this country between 1925 and 1931 the exchange can only be made for gold bullion and that is known as a gold bullion standard.

Though England, as already explained, had a free mint for gold since 1663 and a considerable amount of gold coinage, it was not till 1816 that she finally adopted the gold standard by introducing as the new standard unit of the currency the gold sovereign of 123·274 grains troy of standard gold which was the same thing as saying that 1,869 sovereigns were made out of 480 oz. troy of standard gold or that the mint price of standard gold was £3. 17*s*. 10½*d*. per oz. troy. It is a simple calculation from this that the price of fine gold was as near as need be £4. 5*s*. 0*d*. per oz.[1]

A free mint, however, does not necessarily mean that the government does the work of coinage without any charge. This is called gratuitous coinage, and England was the only country that did so. Most countries charge the cost of coinage, called brassage, and sometimes an extra profit called seigniorage. The latter, however, is very often used to include both the actual cost of coinage and any extra profit that may be made.

The result of the English system of gratuitous coinage was that the English sovereign was the only coin in the world which was absolutely right. A very little consideration will serve to show how the free mint kept the coinage right. It is obvious that if the government is prepared to buy any quantity of gold at the price of £3. 17*s*. 10½*d*. per ounce, no one will sell gold for less than that price. On the other hand, if any outside merchant were to offer more than the mint price he would have such a quantity offered him, sovereigns being melted down and sold to him at a profit, that he would soon cut down his price again. Besides, why should any one offer more than £3. 17*s*. 10½*d*. for gold, when he can get it at that price by simply melting down new sovereigns? Thus the mint price of gold, which was the same, considering the differences of standard, in all countries, practically fixed the value of gold bullion all over the world, so that the price never varied more than a small fraction per ounce.

---

[1] The fact that the market price of gold (which is based on fine gold) is now over £7 per oz. simply means that since 1931 England has been off the gold standard. A pound cannot now be exchanged at the Bank for a gold sovereign, but gold can be bought in the bullion market at a varying price which simply represents the depreciation of sterling. England is now on a so-called sterling standard, which means that there is no *fixed* standard at all.

Incidentally it must be explained that as a matter of fact the actual price of standard gold in the London Bullion Market fluctuated round £3. 17*s.* 9*d.* not £3. 17*s.* 10½*d.* as already stated. The reason was that for many years before the War it had not been the custom in England for any one to take his gold to the Mint itself and have it coined on his own account. Though any one was entitled to do that, in practice it was found more convenient that the Bank of England, which is in reality though not in name the government bank, should act as agents for the Mint in receiving bullion for coinage. Any one who had bullion for sale, therefore, instead of taking it to the Mint and leaving it to be coined at their convenience, which would mean a considerable delay, took it to the Bank instead and received the corresponding amount of sovereigns at once, or at least as soon as the gold had been weighed and assayed to prove its standard. This was not only a convenience to the owners of the bullion, but it also saved them the delay of coinage, and time means money, because the value of the gold would be just so much idle capital while it lay at the Mint waiting to be coined. Though this sounds a very small matter yet it is really quite an important consideration, and the owners of bullion were quite willing to pay for it. The Bank therefore by arrangement paid only £3. 17*s.* 9*d.* per ounce or 1½*d.* per ounce less than the statutory price, and this formed at once the remuneration of the Bank for its trouble in the matter and some recompense to the Government as owners of the Mint for their loss of interest on capital. Thus as a matter of fact the Bank became in a sense an agency of the Mint and the bulk of the bullion lay in the Bank safes uncoined until coinage was required, when it was taken out and forwarded to the Mint.

So far then for the gold coinage of England, but the matter becomes much more complicated when it is remembered that every country requires more than one coinage; for example, they must have silver and copper coins as well as gold. Now to fix a mint price for silver is essentially a different operation from that of fixing a mint price for gold, which only means fixing arbitrarily the weight of the standard coin, or the number of coins to be made out of a certain weight of standard bullion. As already pointed out, it was mainly the result of an accident that the present price of gold was fixed, or in other words that 46·725 sovereigns are made out of a pound troy of standard gold. Had we to begin over again with a new coinage it is possible that an even number, say fifty, would be selected, which would mean that the mint *price* of gold would be raised, but it would not make the slightest difference in the *value* of gold, that is to say its purchasing power.[1] For it cannot be too often repeated that the mint price of gold is not its real value, but merely its price or exchange value in terms of itself, which of course is not an exchange value at all. The real value of gold is its purchasing power, its value in exchange against all other commodities, and that varies frequently, quite regardless of the price of gold which, being purely arbitrary, remains fixed. It is just the same as if for some reason it were decided that in future there should be only ten inches in a foot instead of twelve; this change of the standard of measurement by increasing the size of an inch would not make the slightest difference in the length of anything, but merely in the terms used to express that measurement. The mint price of gold, therefore, is merely the result of an arbitrary decision as to the weight of a sovereign which has no effect whatever upon the value of gold.

The mint price of silver, on the contrary, is a real value, its value in exchange against gold, and through gold against all other commodities. But this exchange value of silver is already fixed by the market according to the forces of supply and demand. To fix an arbitrary mint price for silver is therefore impossible; it must be in accordance with the actual market value. This could be done well enough; but the difficulty is to maintain the price, once fixed, in accordance with the market value, because that market value fluctuates frequently and considerably, and, unlike those of the value of gold, the fluctuations in the value of silver are clearly seen, because they are shown by its price in terms of gold. The price of silver is a real price, its price in terms of another commodity. Thus the fact that the price of gold does not vary disguises the fact that its value varies, because the variation is shown in an inverse way by the variation of prices of other commodities. When the value of silver varies, the variation is shown at once by its price in terms of gold, that is to say by the amount of gold which must be paid for an ounce of silver. This had varied before the War from 62$\frac{1}{16}$*d.* per ounce in 1859 down to as low as 21$\frac{11}{16}$*d.* per ounce in 1903 (see Table IV). These fluctuations in the value of silver are even larger and more frequent than those of gold because, in the first place, the supplies of silver are much larger and more variable than those of gold, and, second, because the uses of silver in trade and for industrial purposes form a much larger proportion of the total requirements than in the case of gold. A large part of the total annual production of gold, is bought up by governments for use as coinage or gold reserves; but the proportion in the case of silver is very much less. In the case of copper and nickel a mint price is for similar reasons altogether impossible. The price of these metals is fixed entirely by their value for industrial purposes, and the demand for coinage purposes is negligible.

---

[1] But it would make a difference in the purchasing power of a *sovereign* because it would contain less gold, so that commodity prices, which are expressed in sovereigns, would rise.

This, however, leads to a new difficulty. If silver coins are to be legal tender, then they must come under the same rule as gold; their value must be kept right. If not, a still worse complication is introduced: if the silver is allowed to depreciate or become weak, it will cause the gold coinage to disappear out of circulation, and the same would happen in the reverse way if the silver were to become strong, the gold coinage would be relatively weak and the silver being appreciated would disappear. This is called Gresham's Law, viz.: that *of two coinages both circulating freely as legal tender in any country, the weaker always tends to drive out the stronger,* or to put it more crudely, that bad money drives out good.

This is at first sight a very hard saying, but a little consideration will show that it is only natural. The chief purpose for which coins are employed is the payment of debt. If both coinages are invested by law with the power of fulfilling that function, and that is what is meant by saying that both are legal tender, then naturally people will choose the worse of the two for that purpose, in other words, they will give away the inferior and keep the better coin. For the other is better in this respect, that while the two are by law equally good for paying debts, there is another market in which they are not equally good, namely the bullion market or the goldsmith's shop. There the value of the gold is slightly better than that of the silver; in technical terms there is a premium on gold. Obviously then the thing to do is to use the gold coins as bullion and keep the silver for use in those other cases where it is just as good as the gold. The mystery therefore disappears when it is remembered that the disappearance of gold from circulation only means that people are keeping the good coinage and giving away the bad. It is only natural to keep the best. Every one therefore uses the depreciated or weak money for paying debts, and keeps the good money for other purposes where its superior value is realized.

A few illustrations of the circumstances under which Gresham's Law may come into force will make the matter clearer. A very common case is where an old or worn coinage is in circulation and the government decides to replace it by a fresh issue of new coins. Although the new coins are no better than the old as regards purchasing power, yet instinctively every one who receives the new coins tries to keep them. The result is at first sight paradoxical. Immediately the new issue is made it disappears, but the old worn coins are more in evidence than before, and unless the government calls in the old coinage as fast as it issues the new, the old coins would remain in circulation alone for a long time. This points to one essential condition of the operation of Gresham's Law; there must be enough of the weaker coinage to supply the currency requirements of the country or the good coinage will not disappear. A certain amount of coinage is required to carry on the daily business of the market, and if there is not enough of one coinage to do that work another will be employed to make it up. Thus as a rule it is only when there is a free mint for the depreciated coinage that Gresham's Law operates strongly, because then the mere fact of the depreciation tends to increase the supply of the weak coinage. As long as the mint is open it pays to turn the depreciated bullion into coins. This points to the second illustration of Gresham's Law where a depreciated coinage of, say, silver is in circulation as legal tender along with gold. Here the very fact of the depreciation and the free mint causes further depreciation, because with a free mint it pays to take silver to the mint, have it minted into coins and use these coins in the market to exchange into goods and then into gold which will finally be turned into more silver bullion at its depreciated market value and again coined into legal tender coins at its full face value. Thus the depreciation is cumulative.

The most common case in which Gresham's Law can be seen to operate strongly is perhaps that of depreciated paper money circulating as legal tender alongside of metallic money, especially gold. As will be seen later on, the War provided a number of illustrations of this problem which had for so long been one to which most European nations at least were complete strangers.

It remains to consider one more point in the working of Gresham's Law, namely, where does the good money go? In the first place it simply remains in possession of whoever is lucky enough to possess it, and rich enough to be able to keep it, that is to say it is saved up or hoarded. If a man wishes to lay up a store of money he will naturally choose the newest and best coins he can find. But in countries where people put their money in the bank the thing works out in a different way. Gold finds its way to the bank, and when the banks require to send money abroad, as they do frequently in payment of a temporary indebtednesss of their customers to others in foreign countries, they naturally send the gold, because if they sent silver they would only receive credit for its bullion value, and its face value at home is more than that. Thus silver is kept for use at home and the gold is used to pay foreign debts, and so the good money goes abroad.

Again, it pays to sell the good money as bullion, and this transaction can be combined with the former in a most ingenious way. As long as there is a free mint for silver in one country the bullion value of silver in that country cannot depreciate to any material extent, and the local value of silver bullion is artificially maintained there. But there is nothing of this sort abroad, with the result that silver is much cheaper there than it is in the country where it can be freely coined into legal tender money. What merchants do, therefore, is to turn all their silver into gold at home at the locally inflated value of the former, send the gold abroad and buy silver bullion with it at its world value, then have this silver coined at the home mint into silver coins at a considerable profit and change these again into gold in the course of trade. The effect is that rapidly all the gold disappears and there is nothing left in the country but silver.

But it may be asked, why does this never occur in those countries such as England which do as a matter of fact use silver coinage as part of their currency. The answer is very simple. In such countries there is no free mint for silver. The government retains the coinage of silver entirely in its own hands, and no one else can issue silver currency nor get silver minted into coins by the government. The government thus makes a considerable revenue out of the seigniorage on its silver coinage but not without incurring a serious responsibility: it must see that it does not issue too much silver or the silver would at once begin to fall in value or, as it is called, to depreciate. To preserve the right balance between excess and deficiency in this way is no easy matter, for either extreme is almost equally disastrous. An insufficient supply of silver coinage causes great inconvenience and loss to every one who wants change for gold. Naturally the government would not have too little intentionally, because to do so is simply throwing away the opportunity of making the seigniorage out of a further issue. But the consequences of over-issue are so serious that the government must be constantly on its guard against it, and must be ready at any moment to withdraw the surplus if signs of over-issue appear. Yet with all the care possible, mistakes or miscalculations of this kind will inevitably occur even without a free mint for silver, and the risk of over-issue with a free mint would be so serious that the government must take other steps to guard against it. The great danger is that if silver were legal tender with a free mint any depreciation of its market value would tend to an over-issue of silver which would drive the gold out of circulation and in a short time out of the country. To guard against this the obvious remedy is that silver must not be legal tender, and that its issue must be retained in the hands of the government; and this, as a matter of fact, is the policy adopted by most countries. The silver coinage, and of course the same applies to the nickel and copper coinages, is only token money as it is called, its bullion value is less than its face value and it has only a very limited legal tender, which is from the point of view of economics no legal tender at all. In England, for example, payment in silver can only be legally enforced to the extent of £2, and copper to the extent of one shilling. It follows from the character of token money that the mint is closed to the coinage of silver.

This seems quite an easy way of solving the difficulty, but unfortunately it is not so easy as it seems, and in fact it was the cause of one of the greatest economic controversies that has ever raged throughout the world, namely that between the rival systems known as Monometallism and Bimetallism, which will be explained in the next chapter.

CHAPTER V

BIMETALLISM

The meaning of the question and its importance.—Insufficiency of gold alone for the world's currency requirements.—Instability of the value of gold.—Difficulties of national bimetallism.—The Latin Union and its history.—The position of India and America.—Possibilities of international bimetallism.

It is difficult now to realize that the bimetallic controversy once occupied the foremost place among economic controversies throughout the world, so completely has the question apparently fallen asleep in these days. Yet the question still has its interest and its importance not merely as a part of the modern history of currency questions, but because it might be revived again some day if the conditions of the world's supply of the precious metals and their use as currency returned to anything like their former position.[1]

On the face of it the question does not seem of any great practical importance. Why should the whole civilized world have been divided into two bitterly hostile camps over the question of whether silver coinage should be legal tender or merely token money? But though that is all that the controversy amounted to on the surface, its real meaning was something deeper and of much greater practical importance. It involved the fundamental principles of currency and was based on the Quantity Theory of Money and the whole question of the world's currency requirements and how these are to be met. The pivot of the controversy was whether gold alone should be legal tender, or whether both gold and silver should be made equally available for the payment of debt without limit. If the double standard be adopted it follows that some fixed ratio must be set up and maintained between the value of the two metals as bullion, this ratio of value corresponding with the relative weight of the standard coins of the two metals and the market values of gold and silver. To secure the permanent rightness of both coins there is only one possible method. The weight and value of the two coins must be fixed upon some assumed ratio of value between the bullion of the two metals, and effective steps must be taken to enforce this ratio permanently upon the actual market values of the two metals. As we have seen, the only practical method of doing so is to establish and maintain a free mint for the coinage of both metals into the standard money at the fixed ratio. Thus the famous Classical Ratio of 15½ to 1, which was finally adopted by France in 1803 and maintained by the Latin Union till 1873, meant that the weight of silver contained in twenty silver francs or four five-franc pieces, viz. 100 grammes, was exactly the same as that of the gold contained in 310 francs gold or 15½ Napoleons of twenty francs each, for the standard in France is the same for gold and silver, nine tenths fine. For seventy years the countries of the Latin Union maintained this ratio against the gradual adoption of monometallism by the rest of Europe; and it was their acknowledged defeat in 1873, when they were finally forced to give up the struggle and close their mints to the free coinage of silver by the public, that produced the conditions which led to the controversy.

---

[1] Cf. the U.S. government's policy for the rehabilitation of silver from 1933 onwards. See Chap. XV.

The maintenance of a free mint for silver is the crux of the whole bimetallist position. The opposite view is that gold coins alone should be legal tender, silver being merely token money like nickel or copper, and that the coining of the silver should be retained entirely in the hands of the government. This is called Monometallism or the Single Standard and was the system adopted by England, Germany, Japan, &c., and in effect also by France and the Latin Union after 1873. To understand the importance of the question it is necessary to study the history of the currency conditions which gave rise to it, and to see how the various countries adopted the alternative systems between which the controversy arose.

It has been explained in the previous chapter how England was the first country in the world to allow the free export of the precious metals in 1663, and how the subsequent history of the guinea led England almost unintentionally to fix a tariff or ratio between gold and silver when in 1717 the value of the guinea was fixed at 21*s*., at which rate it was made legal tender. This was equivalent to a ratio of about 15¼ to 1. From this point England gradually and almost unconsciously drifted into the adoption of gold as its chief currency in place of silver. The first definite step was taken in 1774 when it was enacted, owing to the very bad condition of the silver currency at the time, that silver coinage should only be compulsorily acceptable by tale or count up to a limit of £25, this being the first limitation ever placed upon the full legal tender value of silver coins. In 1798 during the Napoleonic Wars which had rendered necessary the suspension of gold payments by the Bank of England, the free coinage of silver at the English mints was suspended. Incidentally the result was that the silver coinage rapidly sank into a very bad state and became so deficient in amount that all sorts of token money were issued by banks and even private individuals, and large quantities of French silver coin were actually brought into the country to supply the deficiency, a very strange expedient considering that it was with France that England was then at war. It was probably the very bad state of the silver coinage and the appreciation of gold, due to this and the suspension of payments, which led men gradually to think of gold as the better coinage. At the same time the increasing wealth of England due to the development of her young industries was making it necessary to handle a great deal more money in the course of business, and the inconvenience of silver with its low value and heavy weight was being increasingly felt. At any rate the fact is that when, after the war was over, the question of the reform of the currency came up in 1816, it was almost unanimously agreed that gold was the better currency for England in the future, and the Act of that year adopted this view. Under it the gold sovereign became the standard unit of the English coinage; silver was reduced permanently to the subsidiary position of token coinage, its legal tender being limited to £2, and the Mint was not reopened for its coinage. At the same time the bullion value of the silver coins was slightly reduced, for the Act provided that in future sixty-six shillings should be coined out of 12 oz. troy of standard silver instead of the old rate of sixty-two. Thus England definitely adopted gold monometallism.

From 1803 onwards the history of bimetallism lies mainly with France and her continental neighbours. After the early part of the nineteenth century, especially from 1820 onwards, gold was mainly appreciated, that is to say its bullion value was really higher than the fixed ratio of the French mints. The inevitable effect was that there was a very considerable coinage of silver at the French mints and a good deal of gold was exported, but its disappearance was comparatively little felt, as the large silver five-franc coins served the purpose fairly well.

The great discoveries of gold in California and Australia in 1848–9 changed the whole situation. The world's output of gold increased enormously,[1] but the real meaning and effect of the increased supply were not realized for a considerable time even by experts. In France the gold Napoleons were hailed with delight as the visible sign of the new Golden Age, and the great Exhibition at the Crystal Palace in London was regarded as the celebration of the dawn of an unprecedented era of peace and prosperity throughout the earth. Gold was everywhere, to an extent which had certainly never been known before in modern history, and it was not for some time that suspicion was aroused as to the true meaning of this abundance of gold. What first made people realize it was the gradual dawning upon the people in France that their silver was disappearing. Then at last economists and financiers woke up to the real meaning of things. Gold was depreciating and was driving out silver under Gresham's Law. But it was not until 1865 that the continental countries decided on common action to meet this situation. In that year the Latin Union was established by the formal decision of France, Italy, Switzerland, and Belgium to arrange their currency systems on the basis of a standard coin of equal value in every country, which would therefore circulate freely between the different countries. The franc became the model of all their coins, though Italy preferred naturally to retain its old name 'lira' for the new coin, and of course each nation retained its own designs and inscriptions on its own coins. Greece also joined the Union in 1868.

---

[1] See Table I.

The problem which faced the Latin Union was one of great difficulty. Being committed to their policy of bimetallism they could not entertain the idea of abandoning legal tender and a free mint for silver, yet they could not go on supplying coined silver for all the world to use as silver bullion, as India, for example, was doing then, at their expense. An ingenious compromise was conceived—it was first adopted independently by Switzerland in 1860—that they should reduce all their silver coins to mere token money, except the five-franc piece, and of course close the mint to these degraded coins. The effect was that the drain of the five-franc pieces abroad continued till the supply was exhausted, but the smaller coins remained in the country and served every purpose of a silver coinage quite well; in other words, they provided the necessary change which is the chief function of silver currency nowadays, large amounts being generally paid in gold.

Almost before this remedy was put in force, however, the whole conditions of the problem began to change again in the reverse direction. New discoveries of silver in America in the early 'sixties resulted in an increased output of silver,[1] which rapidly reduced the relative value of silver to a point below the ratio. Now silver was depreciated relatively to gold, and the action of Gresham's Law was reversed. The gold began to disappear, and Europe was flooded with silver. This was even more serious than the first difficulty. France could do without five-franc pieces but she could not do without gold, for in those days the modern use of paper money or bank-notes for the payment of large sums had not been fully developed. Things went on in this way for some time till the action of Germany after the Franco-German War precipitated the crisis. Germany had long been watching England's industrial and financial supremacy, and, rightly or wrongly, had come to the conclusion that her position was partly due to her adoption of gold coinage; and Germany had evidently made up her mind to follow that example at the first opportunity. The indemnity of £200,000,000 which Germany extorted from France provided the opportunity. Germany stipulated for its payment in gold, and forthwith proceeded to throw upon the market huge quantities of her heavy silver 'thalers', which were of about the same size and value as the five-franc pieces. The addition of this enormous weight of silver to the world's available supplies, already so much inflated by the new stocks from America, and the withdrawal of Germany from the market as a consumer of large quantities of silver for currency, produced an absolute slump in the value of silver, and prices began to fall in a most alarming way.

---

[1] See Table I.

The Latin Union were in despair. No sooner had they managed to circumvent one difficulty than they were forced to face round to the opposite extreme and devise some other new expedient. The double experience convinced them that it was impossible to maintain the double standard and their fixed ratio against such a combination of forces; but their difficulty was to discover a remedy which would meet the situation without formally abandoning their bimetallic policy, for that had become a matter of national pride, and they were now especially reluctant to abandon it, because to do so would practically mean following the example of Germany. What they did finally decide upon was another ingenious expedient. They refused to abandon the five-franc piece, that being the only silver coin which retained its legal tender, but they closed the mint to its coinage. Thus in effect they ceased to be really bimetallic at all, because they had only one silver coin which was legal tender, and the mint was closed to its coinage by the public. Thus the system of the Latin Union came to be known as the Limping Standard because it was neither the double nor the single, but something half-way between. In effect it was practically monometallism, but in theory the currency was bimetallic because both gold and silver were legal tender.

But the action of the Latin Union was the last straw which broke the price of silver, and from 1873 onwards its fall, as will be seen from Table IV, was greatly accelerated. It was not for some time, however, that the world began to realize that the currency question was more than merely a question for the producers of silver who were suffering by its fall. The price of silver was obviously falling to unheard-of levels, but so was the price of everything else, and it was not for some time that it began to be realized even by economists that there was a connection between the two facts. The Quantity Theory of Money is of course as old as the Greeks, but it was entirely new to the man in the street, and for many years it was received with nothing but ridicule by business men of every country, especially in England, where the great financiers of the London Money Market simply refused to listen to it as a practical question. Gradually, however, conviction grew in thoughtful quarters, and the evidence became more and more convincing. The world's production of wealth of all kinds was increasing with unprecedented rapidity, and more and more money was required to carry on the world's business of exchange. But the world's production of gold had been definitely checked (see Table I), and silver was no longer available for the larger part of the world's monetary requirements, because in nearly all European countries it had been in effect demonetized. The result was that there was not enough gold in the world to do the increased amount of money's work required, and the effect was inevitable; what money there was had to be spread out thinner and made to go farther. In other words, prices fell because money was scarce and less of it had to serve. Goods had increased faster than money, and the quantity of money obtainable in exchange for a certain quantity of goods was reduced. Gold had appreciated again, and the general level of prices was falling. It will be seen from the Index Numbers in Table V how far prices did fall from 1873 to 1896.

In the meantime, however, the problem was becoming specially pressing in India, which was directly affected by the fall in the value of silver, as a country possessing an entirely silver currency was bound to be. The value of the standard unit, the rupee, at the original price of silver, 62*d*. per ounce, was two shillings; but its exchange value outside of India was being steadily dragged downwards by the fall in the world's market value of silver. The inertia due to India's enormous population, with its huge silver demand both for coinage and industrial purposes, and the existence of a free mint for silver, combined to maintain silver artificially at a higher price in India itself. But the effect of the fall of the external value of the rupee upon India's foreign trade and her position in relation to other countries, especially England, was disastrous. All her revenues were received in India in silver, but when her debts had to be paid abroad the silver fetched only its market value, which by 1893 had fallen to about 35*d*., and this meant that the value of the rupee for foreign exchange purposes was only about 1*s*. 2*d*. The effect upon the financial position of the Indian Government, especially as regards its foreign remittances, was intolerable, for the loss on the exchange must in the long run fall upon the Indian tax-payer, who had to make up the annual deficits by taxation. Further, the position of the exchanges had a very serious effect upon the position of India as an importing country, though it is only fair to recall that the corresponding effect on the export side was entirely in India's favour. For the depreciation of the rupee meant that every importer had to pay more for his goods than their face value in rupees, while every exporter received a bonus on his trade, because he produced his goods in India for rupees and sold them in London for gold, which when brought back to India exchanged for much more than its face value in rupees. But what did the greatest harm to India's foreign trade was the constant risk and uncertainty introduced by the fluctuations of the exchange, dependent upon the varying value of silver. There is nothing so bad for trade as such unsteadiness of prices, for merchants cannot afford to take risks unless they see their way to make a sufficient profit on the whole to cover their losses, and a little over to compensate them for the risk, and the public must in the long run pay higher prices to cover these risks.

The position was rapidly becoming intolerable, and finally the government appointed a Committee to inquire into the whole position. The remedy suggested by the Committee's Report in 1893 was a heroic but most controversial measure. The only way to stop the fluctuation of the exchange value of the rupee was to regulate the supplies of coined rupees, but they could not do that with a free mint at which any merchant in the bazaar could demand to have unlimited quantities of silver coined at the face value. They therefore decided to recommend the closing of the mints to the free coinage of silver, an apparently simple and harmless measure, which, however, involved the most serious consequences. For the fact of the existence of the open mint in India had always helped to maintain not only the world's price of silver but especially the actual price of silver in the Indian bazaars, and in India silver in the form of ornaments was a favourite investment for spare capital. But the closing of the mints meant an immediate fall in the Indian price of silver to something more like the world's price, and, further, a severe fall of the world's price owing to the withdrawal of India's enormous demand for silver both for coinage and for use in industry.

The result was that the government found themselves in a dilemma between two classes. If they let things alone the whole country through its government and its merchant system would be ruined. If they closed the mints, the country would be saved at the expense of the holders of silver whose store of invested capital would be reduced in value by at least one-third. Faced with the choice between two alternatives, which inevitably meant serious loss to one class or another, they finally decided that those who would lose by the fall of silver were less to be considered, or were better able to bear the loss, than the others who would benefit by the closing of the mints. The measure was bitterly criticized at the time and for many years afterwards; but the opposition had completely died down before the War. It was very clearly brought out by the Indian Currency Commission of 1913–14 that whatever may have been the depth and extent of the feeling against the closing of the mints in 1893, the measure had in effect been justified by subsequent events, and hardly any one suggested its repeal. After 1893, then, the rupee was artificially maintained at its new value of 1*s.* 4*d.*, or fifteen to the £, which is equivalent to a silver value of about 42*d.* per ounce.[1]

The effect of the closing of the Indian mints upon the price of silver was, as had been anticipated, to produce a further fall, much worse than anything that had gone before. To this, however, another cause contributed. In America, which is a great silver-using as well as silver-producing country, the silver question had also given rise to great controversy. Before 1873 the general use of paper money in the United States had practically displaced silver as the actual means of currency in many parts of the country; but the steady reduction in the demand for silver for coinage purposes throughout the world had greatly alarmed the silver producers of the West, and in

---

[1] See Chapter XIII for later developments.

1878 they succeeded in getting through a measure known as the Bland Act, which was intended to counteract the effect of falling demand. This Act compelled the United States Treasury to purchase two to four million dollars worth of silver every month and coin it into silver dollars, which were to be legal tender; but as no one wanted these dollars in actual circulation, it was agreed that they should remain in the Treasury while their place was taken in actual use by silver certificates or paper dollars, which were, of course, immediately convertible into silver currency, if any one wanted that. But this measure naturally failed to stem the tide which was overwhelming the value of silver, and in 1890 it was replaced by a further proposal known as the Sherman Act, which raised the monthly purchases to 4½ million ounces. At that time the price was about 47*d.* per ounce, so that the value of the proposed purchases was just about the maximum of the Bland Act, while the Treasury had hardly ever exceeded the minimum. But still it was all in vain, and, as already stated, the price continued to fall so rapidly and so far that in 1893, the same year as the Indian mints were closed, America had to abandon her attempt to hold up the price of silver unaided, and the Sherman Act was repealed. As will be seen from Table IV, the price fell still further after 1893, and in 1902 it touched 21$\frac{11}{16}$*d.* per ounce.

Thus, as the end of the nineteenth century approached, the Bimetallic controversy seemed to be solving itself by the general failure of its advocates to maintain their position against the overwhelming weight of those nations which had elected to follow the example of England. The Latin Union, India, and America had been practically forced to give up their attempts to maintain the standard of silver, and it seemed as if the world were drifting rapidly towards universal monometallism. But there were several reasons why this prospect could not be regarded with equanimity. Chief of these, though entirely discredited by the commercial community, was the Quantity Theory of Money and the steady fall of the general level of prices, for which there seemed to be no prospect of a remedy. But there were other arguments which appealed more convincingly to the ordinary business man. In the first place, the silver-producing countries of the world were greatly alarmed at the fall in the price of silver, as was evidenced by the desperate attempts made in America to prevent it, and it was in America that the agitation in favour of the double standard was strongest and lasted longest. Presidential elections were fought over the issue, and no stone was left unturned to force the question upon the further consideration of Europe. The countries of the Latin Union were only too willing to join the struggle, for they were still in a very difficult position. They could not formally abandon their theoretical bimetallism because, to take France as an example, the Bank of France still held large reserves of five-franc pieces, which stood in their books at their full face value, and the bank could not face the writing down of that value which would have been inevitable if these coins lost their legal tender value. Again, as long as there remained in the East such countries as China which still retained their silver standard—Japan abandoned it and adopted gold in 1897—the business of foreign trade between Europe with its gold standard and these silver-using countries was still subject to all the difficulties of the old régime.

The result was continuous efforts on the part of the bimetallists to bring the question to the front, and repeated Conferences were held at which the question was threshed out again and again. But England, with her enormous financial preponderance, continually blocked the way, and finally with the end of the century the question seemed to fall out of practical politics. It was some time, however, before the real reason of this became evident. Once again circumstances were changing. The development of the South African gold fields, followed by the discovery of the Klondike fields in America in 1896, had begun to change the whole situation with regard to the world's gold supply, which was now increasing again by leaps and bounds. The result was at one stroke to destroy the primary argument of the bimetallists, while by a strange paradox it proved once and for all the soundness of their theory. From about 1896 prices under the influence of the increased gold supply began to rise again, and before the new century was many years old the world was actually beginning to wonder whether a rise in prices might not perhaps prove as bad as the long-continued fall which had lasted for nearly twenty-five years.

For the time being then the new conditions took all the point out of the main argument in favour of bimetallism, and indeed there was some reason to feel thankful for its failure, for as the gold supply increased and prices rose, people could hardly help asking, 'What would the rise of prices have been if silver had been restored to its position as part of the world's currency supply?' The joint supply of gold and silver might well have been overwhelming. As a matter of fact the difficulty during pre-war years had almost been to get rid of the increased gold supply, and to prevent a depreciation of gold which would show itself in a serious rise of prices. That danger was to a large extent avoided by the fact that all the principal nations of the world, inspired to some extent by the traditional policy of the years when gold was scarce, rushed to take the opportunity of building up great reserves of gold, and the enormous supply was taken up very easily. India too began to absorb gold in very large quantities, and any danger of an over-supply of gold was at least postponed.

But the lesson of the Bimetallic controversy was that as long as the world used mainly a metallic currency for the bulk of its money's work the amount of that metal produced in the world would over long periods affect the general level of prices, and there still remained the argument that it would be better if two metals instead of one could be made available as legal tender currency, not only because the joint supply would be greater, but also because changes in the supply of or in the demand for the one currency or the other would be to some extent compensatory, leading to greater stability of prices. The failure of the Latin Union merely proved the impossibility of one nation or even a group of nations maintaining a fixed ratio against the existence of an outside market where there was no such ratio. But suppose it were possible to get all the important commercial nations of the world by an international agreement to adopt the same fixed ratio between gold and silver and to establish a free mint for both at that ratio. There would then be no outside market, and it was at least arguable that if the nations concerned were large enough users of both currencies their purchases of the two metals would be sufficient to steady the market. This became known as International Bimetallism, but it was never possible to test its feasibility because such an international agreement was not attainable.

Now, however, the position is completely changed by the fact that practically every country has given up gold *currency* in favour of paper money or bank-notes and uses gold only as a reserve against their paper currency or against the other liabilities of their banking system, i.e. deposits, &c. Thus the relation between the amount of gold and the volume of 'money' is much more complicated. The moral of the Bimetallic controversy was that token currency is perfectly safe for internal use so long as the government carefully adjusts its circulation to the amount actually required from time to time and that adjustment is left to the government without any specification of limits, the only safeguard against over-issue being that the government is always prepared to withdraw any surplus by giving legal tender currency in exchange for it when desired.

In the case of paper money, however, most governments have handed over the issue to a government or Central Bank in the form of bank-notes but under very careful restriction as to the security to be held by the bank for the protection of the note holders and that security always includes a certain proportion of gold. The next question therefore is the theory of paper money and its relation to gold.

CHAPTER VI

PAPER MONEY

Different kinds of paper money.—Differences between paper and metallic money.—Limits of issue of paper money.—Signs of over-issue.—War paper currencies.

It has been shown at the end of Chapter III that the correct application of the Quantity Theory of Money requires a detailed consideration of all the different kinds of 'money', in the widest sense of the term, which under modern conditions are employed to do the work of exchange. The progress from one kind of money to another was a logical development or evolution, from money with full intrinsic value, through that which has only partial intrinsic value, namely token money, to that which has no intrinsic value at all, namely paper money. This development is perfectly logical, yet when the idea is baldly put forward that a scrap of paper may serve the purpose of money just as well as a piece of shining and much-coveted gold, it is at first startling. But the puzzle disappears when it is remembered that what men want money for under modern conditions is not to hang on their watch chains or round the necks of their womenfolk as ornaments (though such uses had much to do with the original choice of the precious metals as the best money material) but only to pay their debts with, and to exchange for commodities. A coin is simply an order on every producer to hand to the bearer a certain quantity of goods, and that order can be conveyed quite as well by a written paper, if there is the same sanction or authority behind the written paper, namely common consent, upon which in the long run even the gold or silver coin depends for its value. It is because every one is willing to accept gold and silver that every one else is willing to take them in payment. The same unanimous agreement could invest anything else, even paper, with the same power. This will be clearer if a distinction is made between three kinds of paper money.

(1) Representative or convertible paper money merely represents an equal sum in coin deposited somewhere, say in a bank or the treasury of a state, like the silver dollar certificates of the United States. It is easy to understand this form of paper money. It is more convenient to handle in bulk than the coins, especially silver coins, and it is quite certain to be worth its value in coin at any time, because it is convertible at will.

(2) Fiduciary paper money is merely a promise to pay, and obviously its value depends on the confidence of the public in the ability of the promissor to pay. If he is known to be a reliable man, there is no reason why his written promise should not pass current and be as good as gold. If, as was strongly illustrated during the War, the promissor is a government in whose good faith and solvency the people have boundless confidence, the validity of the notes may be unquestioned.

(3) Conventional or inconvertible paper money represents nothing, and makes no immediate or definite promise of anything. The term paper money in the full sense of the word should almost be confined to this kind. It is usually issued by a government which has no coin, and is in need of money to pay its debts or supply its requirements. It may be marked £5 or $5 like a promissory note, but every one knows that the government has no intention of paying the money at any particular date, and probably has no immediate prospect of having money to pay it with. It is in this form that paper money is hardest to understand, yet experience, confirmed by the history of the currency expedients adopted during the War, has shown that, under certain conditions, it is quite possible for such paper money to pass current, and to do the full work of metallic money. If these pieces of paper are invested by law and common consent—both being absolutely necessary, if anything common consent is the more necessary of the two—

with the power of paying debts and exchanging for commodities, there is no reason, under certain limitations, why they should not circulate as freely as gold or silver. But there are certain differences between paper money and metallic money which must be carefully noted because they indicate the dangers of paper money, and also the conditions which must be observed if it is to serve its full purpose.

In the first place, the value of paper money is more precarious than that of metallic money because its value was given to it by the government and might be taken away in the same way, when it would become worthless. Of course, the repudiation of its paper currency is a flagrant breach of common honesty of which no government would willingly be guilty, because, apart from the dishonesty of it, the effect upon the government's future credit would be disastrous; but experience had shown, even before the War, that a state might be driven to this extreme course by force of circumstances or by political conditions, such as a revolution, and this experience was repeated with dramatic intensity in many countries during and after the War. Repudiated paper money loses its value completely by the stroke of the pen. Coins, on the contrary, even if they cease to be legal tender, have still their value as bullion.

Again, the value of paper money is more restricted because it depends on the law, and the paper money only passes current where that law holds good—that is, within the territory of the government which issued it. Outside of that it is of no value unless some one can be found who has means of returning the money to its own country, such as Cooks' or an international banker. But the value of gold coin depends not on the will of the government which issues it, but upon its own bullion value, which is the same all the world over. Thus metallic money, especially gold, is essentially the universal and international money.

Finally, the value of paper money is more variable than that of metallic money, because its value depends on the amount issued, and that depends entirely on the will of the issuing government. It is the easiest thing in the world to issue more paper money at a time of financial crisis, and most governments who once begin the issue of inconvertible paper money find it very hard to resist the temptation; but, as will be seen shortly, any increase beyond the proper limits of safe issue means inevitable depreciation.

The advantage to a government of issuing paper money to its own people, that is to say, the selfish advantage to the government at the expense of its people, is obvious, because a forced issue of inconvertible paper money provides an impecunious government with an immediate means of paying its debts to its own subjects at practically no expense at all. It really amounts to borrowing capital without paying interest, and with no immediate intention of repaying the capital. Thus it has been said that the issue of inconvertible paper currency is equivalent to a forced loan to the government.

But, as might be expected, this delightfully easy way of paying one's debts is liable to very dangerous abuses, which were so strikingly illustrated in history that in pre-war times it had come to be almost accepted as an axiom that no respectable government would ever fall so low as to issue paper money—an axiom which went the way of many others under the stress of war conditions. The War taught the governments of Europe what was well enough known as a matter of theory before, that the evils of paper money lie entirely in its abuse. It is all a question of amount; so long as the limit of safety, the amount of currency actually required in circulation by the business needs of the country, is carefully observed, there is little to fear, but anything beyond that is absolutely fatal. This is a point which must be specially emphasized because it was the subject of much misunderstanding everywhere during the War. People talked as if the validity of paper money depended on the good credit of the government, and it was thought that as long as the security was good no harm could come, regardless of how much was issued. But it cannot be too strongly emphasized that the only thing that matters to the value of a paper currency is the amount issued. If that is not too much, it will pass current perfectly well, though the credit of the government be hopelessly bad; while, on the other hand, if the issue is in excess of the real requirements of the country it will depreciate absolutely beyond all prevention, no matter how high the credit of the government stands. The history of the French Assignats during the Revolution ought to have taught the world that lesson for all time. These were based on the finest security possible, for they were really mortgages over the whole State domain, which in effect meant all France. But they were over-issued to an appalling extent, and no power on earth could prevent their fall, which was tragic in its extremity, for at the last an assignat professing to be worth 100 francs or £4 passed current for less than threepence. Even that record was completely eclipsed by post-war history, for the Russian and German currencies became completely valueless.

There is only one absolutely valid security for a paper currency, namely convertibility, because that automatically prevents depreciation *by preventing over-issue*; before actual depreciation could show itself the banks would return some of the surplus paper money to the government for conversion into gold, and the excess would at once disappear.

Fortunately, however, for the peace of mind of any government that really means to act honestly in regard to its paper money there are certain signs which make it possible to tell when the limit of safe issue has been overstepped. The first is the emergence of a premium on gold, which shows itself in the unwillingness of people to part with gold as compared with paper, and the anxiety to secure gold of those who must have it, such as the banks for export purposes. This results in their offering a premium for gold, and of course charging the same to their customers who find it necessary to have gold.

Whenever there is too much paper money it begins to fall in value, and the first to realize it are those who have to send money abroad, because gold only can be sent abroad, even when the paper is all right at home. As long as the gold and the paper are of equal value at home, no one cares which he pays or receives, but the moment people begin to feel a reluctance to accept paper or part with gold the trouble has begun, and the preference for gold very quickly shows itself in a premium at the banks, for they must have gold for their export business.

The effect of the premium on gold, however, does not show itself at once to the man in the street, because he does not particularly want gold; paper serves the purpose for all his business perfectly well. But foreign merchants begin to find it affecting them in another way, which is called a rise of the rate of exchange. The meaning of this will be fully explained in a later chapter, but at present it may be briefly indicated in this way, that merchants who have foreign debts to pay do not normally send gold, even when gold is actually the currency of the country; they buy instead foreign bills payable in the country where their creditor is waiting for payment and post these bills to their creditors. Now before the War a bill payable in London was payable in gold, so that if one had such a bill for sale it was just the same as if one had a bag of gold for exchange. And if paper was less valuable than gold in any country, the owner of a London bill would expect to receive more paper for the bill than the face value of it, just as he would for gold. Thus the foreign rates of exchange rose against the country where paper was depreciating.

The next sign of the depreciation of paper money, or in all probability synchronizing with those already mentioned, is the disappearance of gold, which is the natural result of Gresham's Law. The gold is hoarded or sent abroad to pay foreign debts while the paper money is everywhere at home.

All these indications, however, are comparatively unimportant, and indeed are largely unknown, to the ordinary person at home who, having no foreign connections, is not interested in the foreign exchanges, and who is quite content to receive payment in paper so long as the paper is apparently good for his ordinary purchases. To these people, however, who represent the bulk of the population, the effect of the depreciation of the paper money is soon brought home in another way, by the rise of prices. At first when merchants and shopkeepers begin to feel that the paper money is no longer worth what it once was, the tendency one would think would be to cause disputes over the amount to be paid for things. In practice, however, this seldom happens, because instinctively the sellers of goods, realizing that they are having to pay more for their imports, because these must be paid in gold which costs more than paper, raise the prices of their goods to recoup themselves, and this becomes infectious. The effect is that instead of prices remaining the same, while the value of the paper money is 'cried down' as it were, the easier but equally effective method is adopted, prices are raised, and the real value of the paper money, which is its purchasing power, falls just the same.

It only remains to point out the remedy for over-issue, namely to stop the issue of paper money and withdraw the outstanding paper, by accepting it in payment of debts due to the government such as taxes, while paying debts due by the government in gold. Unfortunately, however, that is just the one thing the government in such a case can never do. It only issued the paper money because it had no gold, or not enough, and to go on paying its debts while receiving payment of none—for that is the effect of the cancellation of the paper money received—is impossible. Yet that is the only alternative to permanent writing down of the nominal value of the currency, or to complete repudiation.

All this shows that paper money if properly guarded may be of great advantage to a nation, especially in times of crisis, but that its use is open to many dangers. As already mentioned, however, in most countries the use of government paper money has been entirely replaced by bank-notes issued by a bank under the authority of the government and on certain terms imposed by legislation as to the securities to be held by the bank against the note issue. So far as these securities consist of gold 'ear-marked' for the conversion of the notes when required, bank notes are representative paper money, but part of the note cover is usually securities, either bonds of the government itself or securities of a more commercial character such as commercial bills. To that extent bank-notes may be described as fiduciary paper money because they rely on the bank's promise to pay, which is reinforced by the bank's power to realize on the promises to pay it represented by these securities. Bank-notes are therefore part of the credit system, and the examination of their position strictly falls into the next chapter. That, however, does not affect the classification of bank-notes as currency, not credit instruments, on page 24. The truth is that bank-notes began as credit instruments but owing to modern legislation they have become more and more currency. In most countries they are now to all intents and purposes a government paper currency and the bank which issues them might just as well be for that purpose a branch of the government treasury.

CHAPTER VII

THE CREDIT SYSTEM

A system of deferred payment and of doing money's work without the use of currency.—The functions of a bank.—The Clearing House.—Deposits and discounts.—Bank-notes contrasted with (*a*) bills of exchange and (*b*) inconvertible paper money.—Assets and liabilities of a bank.—Reserves.

THE growth of the modern credit system, which includes the whole financial system of London and, indeed, of the entire commercial world, is a striking illustration of the way in which the thing described by a word may come to mean so much more than the name itself originally implied. Thus credit simply means trust or confidence, and the original meaning of the credit system was that sellers of goods, in place of demanding immediate payment, were prepared to give the buyer time to pay. In other words, it was merely a system of deferred payment, and in that sense the word is still used by retail shopkeepers. But as the result of a gradual evolution the system has come to mean a great deal more than that. In many cases the debtor, before the time of payment fell due, was able to reverse the position by becoming creditor in his turn, selling goods to his original creditor, and so reversing the transaction or extinguishing his debt by contra account. This has in course of time developed into a system of avoiding the necessity of cash payment altogether, by squaring indebtedness of all kinds by contra accounts. This method has been extended to include not merely debts due by one person to another in the same town or country at different times, but also debts due by persons in one country to those in another, and out of this has grown a most complicated organization, through which an enormous amount of money's work is done without any currency passing at all, by the use of cheques, bills, bank drafts, and so on. Yet the whole organization still in a way merits its original title of the credit system, because the foundation of it all is that people trust each other in accepting these substitutes for money. In fact, the whole financial system of the world is built upon the idea of prompt payment of all obligations. Every one trusts every one else, because every one else trusts him, and as long as the system goes on properly in its circle it works very well indeed. The system may be described as being centred in the modern bank, and the first step is to find out what are the functions and duties of a bank, and how it facilitates the working of the credit machine.

The simplest theoretical case of credit is where a seller of goods, instead of receiving payment in cash, accepts the buyer's promise to pay at some future date. Before that promise becomes redeemable the position of parties is reversed by the purchaser becoming the seller and *vice versa,* and the debt is wiped off by a contra account. This, then, is practically a system of deferred barter—barter of present against future goods. But it would be very difficult always to find two people thus mutually related as debtor and creditor at the same time, and to the same extent. By extending the system, however, so as to include an indefinite number of individuals it may be made highly efficient, just as in the case of barter it was exceedingly difficult to carry on the system until it was extended to include more than two individuals. Thus A buys goods from B and gives a promissory note in payment. B buys goods from C and pays for them with A's promissory note. C in turn buys goods from A and gives him back his own promissory note in payment. The circle may include any number of intermediate buyers and sellers until the original debt is at last cancelled.

A further development followed naturally. Instead of being all debtors and creditors of each other, the idea was invented of having one common debtor and creditor, who would balance all the debits and credits of each trader, and pay or receive the balance due to or by each. This is the business of a bank. A buys goods from B, but instead of giving him a promissory note he gives him a cheque or order on his bank. But the banker has nothing to pay this cheque with until A sells goods to C, and lodges the cheque received from him with the bank. The banker then pays B out of C's account, or, following the original illustration, C sells goods to B and receives his cheque, which squares the accounts of all the parties by cross-entries in the banker's books. The first function of a banker, therefore, is to balance the debits and credits of his various customers, keeping for each of them what is called a current account, into which all the cheques paid in to his credit are entered, and out of which all his own cheques presented to the bank by the payees are paid. It is a convenience to a merchant to have his books kept for him, as it were, by the bank in this way, and it saves the danger and inconvenience of handling so much currency as would be necessary to carry out all these separate transactions in cash. When the bank extends its business to many different towns throughout the country the advantage of this form of payment by cheque becomes still more obvious. A merchant in London can pay his debts all over Great Britain by simply sending cheques to all his creditors. These will be paid in by the receivers to their own banks wherever they carry on business, and will gradually find their way back to the drawer's bank in London, where they will be duly paid out of his account.

But again a further development of the system becomes possible and indeed necessary. As the banking system develops, many different banks grow up in different towns, or even in the same town. Every one does not deal with the same bank. Every bank's customers deal with every other bank's customers, and as the number of individual transactions by cheque increases it becomes necessary for the bankers to provide some one to do for them what they do for their own customers, some one who will keep accounts between them, and balance the debits and credits of the various banks and receive or pay the balances due to or by each bank. This is what is known as the Bankers' Clearing House. In London every bank of importance is a member of the Clearing House, and country bankers are represented there by London agents. Every morning the representatives of all the Clearing Banks, as they are called, meet in the Clearing House, each bringing in the huge bundles of cheques which have been received by his bank's customers from the customers of all the other banks. An account is made up for each bank showing (*a*) on the credit side, all the cheques received by the bank from its own customers drawn in their favour upon other banks; (*b*) on the debit side, all the cheques drawn upon it by its own customers in favour of their creditors but which have been paid into other banks. When these debits and credits have been totalled up, the Clearing House presents to the representative of each bank a slip showing the amount credited to it for the day, the amount debited, and the balance due to or by it. If the balance is due to the bank, the Clearing House will draw a cheque on the Bank of England in favour of the bank for the amount of the balance. If, on the contrary, the balance is against the bank, they will draw a similar cheque for the amount on the Bank of England in favour of the Clearing House, for every Clearing Bank keeps an account with the Bank of England for this purpose. Thus at the close of the day the Clearing House balance at the Bank of England will be exactly as it was in the morning, for it must have received cheques of exactly the same amount as it gave out.

To such an extent has this system of cheques and bank accounts been developed in England that in the year 1929 the total turnover of the London Clearing House[1] for the year was £44,896,677,000. More than 1,300,000 cheques have passed through the Clearing House in one day, while the highest amount paid in one day was £282,157,000 on June 30, 1930, and the whole of this enormous volume of money's work is done without the passing of any currency. It will be seen, then, that the volume of business which can be carried through under such a system is colossal. It would be utterly impossible to carry on such a turnover on any system which involved paying in cash, but a cheque for a million pounds can be drawn and passed through just as easily as one for five pounds. The banking system has, therefore, created a new way of doing business, and the cheque system has been one of the most important factors in the development of our modern commercial world.

---

[1] See Table IX *a*.

The work of the London Clearing House is divided into three sections. The Town Clearing covers all banks in the Central London or City area around the Bank of England, and therefore includes the head offices of all the Clearing Banks except the National Bank, which is an Irish bank with its head office in Dublin, and Williams Deacon's Bank, which has its head office in Manchester. The Metropolitan Clearing embraces all banks and branches outside the Town Clearing but within an area roughly corresponding with the London Postal district, i.e. within a radius of about four miles. The Country Clearing deals only with cheques on those branches of the Clearing Banks outside the Town and Metropolitan areas, and with the cheques of other banks throughout England and Wales who are correspondents of the London Clearing Banks. In addition to the London Clearing House there are now eleven Provincial Clearing Houses in Birmingham, Bradford, Bristol, Hull, Leeds, Leicester, Liverpool, Manchester, Newcastle-on-Tyne, Nottingham, and Sheffield, the figures of which are not included in the returns of the London Clearing House. The separate statistics of the three sections of the London Clearing House and also of the Provincial Clearing Houses are given in Table IX. The list of the London Clearing Banks was as follows in 1939: Barclays, Coutts & Co., District, Glyn Mills & Co., Lloyds, Martins, Midland, National, National Provincial, Westminster, and Williams Deacon's Bank.

The banks, however, have developed other functions as well as that of squaring accounts between their customers, and these have been aptly summarized as *handling* currency and *providing* credit. One of the striking features of modern industry is the greatly increased use of borrowed capital, and the banker is a dealer in capital. A manufacturer sells goods to a wholesale dealer, who after some time re-sells them to a retail dealer, who, in turn, after further delay, sells them to the public, who use them, but perhaps do not pay for them immediately. Thus there is a long interval of time between the first sale of the goods and the final payment of the price by the consumer. In the meantime the manufacturer requires capital to keep himself going, to pay wages and the price of his raw materials, &c. He must take payment from the wholesale dealer by bill at, perhaps, three months' date; but he cannot afford to wait three months for payment. He must therefore sell this promise to pay for ready money, and he does so by discounting the bill with the bank. This is one of the ways in which the banks provide the borrowed capital upon which industry works. Formerly this kind of business accounted for the bulk of the item headed Discounts in the accounts of the Clearing Banks, but since the War commercial discounts have dwindled to very small proportions and most of the banks' discounts are of Treasury Bills. See Table XIII (*b*).

The next question is, Where does the bank get this money? First of all, it has its own capital, but that is comparatively a very small amount. The main sources from which the bank draws its funds are deposits and current accounts. These consist of money left with the bank by people who cannot utilize it themselves, either because for the moment they do not require it owing to the fluctuating requirements of their business, or because they have made more than they can use profitably in their own business, and it lies in the bank till they can find a suitable investment elsewhere. Again, it may be that the nature of their business does not provide a suitable opening for the employment of capital, as in the case of professional men; while others have so little that it is not worth while investing it separately; or from their position they have no means of knowing about investments, and they are afraid to take risks. All these people are willing to give their money temporarily to the bank, if the bank will keep it safe for them and give them a very little interest, or even none at all. They can withdraw their money at any time when they want it. This money the banks get cheap and sell dear. They lend it out to manufacturers, merchants, &c., at a rate of discount much higher than the rate of interest payable to the depositors. The bank takes all the risks and keeps the difference between the rates as its profit or payment for work done and risks taken. This, then, is the second function of the banker; he is a dealer in credit; he buys and sells capital, just as other traders do other commodities, and the effect of the very high development of this system is that in England capital need never lie idle, while on the other hand no genuine venture need remain untried or be lost through want of capital.

There are, of course, many different kinds of deposits, e.g. fixed-term deposits, deposits subject to a certain notice of withdrawal, or others, again, which may be withdrawn at any time without notice. The latter are practically current accounts, which may be drawn upon by cheque as required, or added to from time to time. In Scotland the more usual form is the Deposit Receipt which can only be handled in one sum. Current accounts may be with or without interest; if notice of withdrawal is required they are really deposits. The rate of interest payable by the banks on deposits usually varies according to the length of term of the deposit or the length of notice of withdrawal to which the bank is entitled.

In the period of cheap money from about 1895 onwards the practice of paying interest on current accounts had died out, and rates of interest on deposits were very low. Before the War, however, they were rising again, but the payment of interest on current accounts had never been revived. During the War and in the years immediately afterwards rates of interest rose very high and, with the Bank Rate frequently at 5 per cent. or more, the rate of interest on deposits also rose, for there was a general custom prevailing that the normal rate of interest on deposits should be about 1½ to 2 per cent. less than Bank Rate. In England, however, there was no uniform rate (as in Scotland) for deposit interest. All the banks charged more or less the same rates, but these varied with different classes of customers, and in fact the rate payable was very often a matter of negotiation between the customer and the bank. In this period the payment of interest on some current accounts was also revived, and in England it was difficult to distinguish between a current account with interest and a deposit account.

With the new period of cheap money, since 1932, the rate of interest on deposits again fell till it became almost nominal; but this brought out another distinction in banking practice, namely, that between the 'country' deposit rate and other rates. For deposits by private clients in the provinces the banks had a fixed rate of 2½ per cent. which never varied, but when deposit interest sank to only a half per cent., in 1933, this rate became impossible.

Again, there are many different forms under which the banks lend money, e.g. overdrafts, secured or otherwise, cash credits, discounts on bills, and advances on security of negotiable documents, such as bills of lading, stock exchange securities, or any other form of valuable property. But before he can lend money the banker must first get deposits, and the accumulation of deposits is slow, because it requires confidence on the part of the public in the bank, and that only grows with time. In the early days, however, bankers were able greatly to extend the volume of their turnover by the use of bank-notes. The habit of using bank-notes arose out of the fact that Eastern merchants travelling widely over the then known world from such trading centres as Cairo or Baghdad, instead of carrying gold with them for trading purposes, deposited their gold with a goldsmith at home and took with them an acknowledgement which was in effect what we would now call a deposit receipt. When they met other travellers and bought goods from them they would pay the seller with a letter ordering the goldsmith to pay so much of their gold to him. These 'drafts' would pass from one merchant to another, i.e. they became negotiable instruments and might not be presented to the goldsmith for a long time.

In the meantime the goldsmiths, who at times held large quantities of gold on deposit, gradually acquired by custom the right to use this gold in their own business, but instead of lending the actual gold to other customers they gave them the right to draw on the goldsmith, who was now becoming a deposit banker rather than a mere custodian of the gold; and this developed into the issue of bank-notes. The banker was thus able to make a profit out of the use of the gold, and the original owner had no grievance as long as the banker was always able to repay him his gold whenever he wanted it. The first bank-notes were therefore promissory notes granted by a banker, payable on demand, and their growing use was due to certain differences between bills of exchange (or promissory notes) and bank-notes which made the latter more convenient for passing from hand to hand as currency. In the first place they bear no interest, so that their value never varies, whereas a bill of exchange is subject to the deduction of interest (discount) before its due date and to the addition of interest after it. A bank-note is payable at any time and is always worth just its face value like a coin.

Second, a bill of exchange is a document of title to money, just as a bill of lading is a document of title to goods on board ship, and in order to protect the rights of the 'holder in due course' a very complicated legal system has grown up which gives the holder certain rights or privileges, the most important of which is the right of recourse against previous holders of the bill who have negotiated it by endorsement. But these privileges involve certain duties on the part of the holder, especially the obligation to present the bill on its due date and, if it is not paid, to notify previous holders. But a bank-note is not a document of title to a particular sum of money earmarked or identifiable in the hands of the banker; it is merely a claim against his general estate. It passes from hand to hand without negotiation by endorsement, and its holder has no right of recourse against previous holders, and as there is no 'due date' there is no obligation to present it on a particular date, nor is there any 'prescription' against bank-notes. The freeing of the bank-note from all these formalities was essential to its passing freely from hand to hand as currency. Finally, bank-notes are always for an even sum like £1 or £5, not for an exact sum of pounds, shillings, and pence like a bill of exchange, which again makes them much more convenient as currency.

Bank-notes are therefore the nearest approach to actual money that can be imagined; they are, in fact, practically paper money. So near do they come to being regarded as money that in many cases they have been made legal tender, like the notes of the Bank of England. When notes are issued by a well-known bank which possesses the entire confidence of the people in the country, they are really a very near approach to the ideal form of money for internal use.

In fact, so thoroughly accustomed had the commercial world become to the idea of bank-notes as the most desirable form of paper money, that before the War it had become almost an axiom that bank-notes under proper regulation were better than paper money issued by a government. It was maintained that under modern conditions, even when bank-notes were made legal tender, they were preferable to a forced or inconvertible paper currency issued by the government, and it is interesting now to consider the arguments which were generally accepted in proof of this preference. For the striking fact is that when the war crisis broke over Europe in 1914 all the belligerents at once rushed into large issues of government paper money, apparently forgetting or disregarding the old theories altogether. It is only fair to note, however, that the circumstances were entirely abnormal, especially in this respect, that the choice lay, not between a forced or inconvertible government paper currency and a convertible bank-note, but between bank-notes and government paper, both more or less inconvertible, for, to take the case of England, it is very doubtful whether the government could have escaped the necessity of suspending the convertibility of the Bank of England notes during the War. While, as a matter of legal right, convertibility into gold both of Bank of England notes and of the Treasury notes was maintained all through the War, the practical value of that right was taken away by the virtual impossibility of exporting gold during the War (see Chap. XIII).

But it is still necessary to emphasize the very real advantages of a convertible bank-note issue as against the alternative of an inconvertible government paper money under normal conditions. The most important of these lies in the argument that the method of issue of bank-notes to some extent provides an automatic regulation of the amount issued, which is in itself a safeguard against the danger of over-issue. Theoretically the banks only issue notes in the ordinary course of business, e.g. to their own customers when they draw on their deposits or current accounts, or to their borrowing clients on the discount of bills or on other securities representing real business transactions or actual assets, and this, it is claimed, automatically restricts the issue of bank-notes to something corresponding to actual business requirements for currency. The issue of paper money, on the other hand, is regulated only by the needs of the issuing government. Both these arguments, however, have been somewhat altered by the evolution of modern conditions. The extraordinary development of the financing facilities of the modern banking world and the growth of methods of doing business which, while following the old forms, really represent different kinds of transactions, such as accommodation bills, finance bills, and the like, have to a large extent destroyed the validity of the first argument. This matter will come up again in dealing with the history of the controversy over the bank-note system in England before 1844, when this argument was opposed and finally overcome by the contrary doctrine known as the currency principle.

Again, the second argument with regard to the danger of over-issue by a government has been largely changed by the much higher standard of national honour and financial efficiency and rectitude which was displayed by the governments of the belligerents, or some of them at least, in the issue of paper money during the War; while, if others transgressed the limits of safe issue, it was admittedly under stress of entirely abnormal conditions. It may, therefore, prove the beginning of a new attitude towards paper money on the part of even the most reputable governments. After all, if a government can be trusted to behave with common honesty and common sense, it is just as well fitted to be the guardian of a paper issue as the best controlled bank, except perhaps in one respect. The fact of a bank-note issue being in the hands of a private institution, which is run for the personal profit of its own shareholders, was a certain protection against the dangers of over-issue in one way. A bank is a commercial concern conducted on business principles, and in modern business honesty is the best policy. If a bank were tempted by the prospect of an extra profit into issuing too many notes, the responsible officials knew perfectly well that they were running a frightful risk, not merely of losing that profit as soon as the public began to feel the over-issue and bring the notes back for conversion, but also of losing everything else as the result of the inevitable run on the bank which would follow at once upon the suspicion of its inability to pay the notes. Thus, if a bank over-issued, the consequence was ruin to the bank itself in the first place, though the public as holders of the notes would suffer too. The bankers knew this, and they were not likely to take the risk even if the law allowed them to do so; it was not worth while for the sake of the small extra profit they might make out of the excess of notes.

To an impecunious and not over-scrupulous government, on the other hand, the consequences of over-issue were not so immediately fatal, or the government might not be so quick to recognize the signs of over-issue, because, the notes not being convertible, the government could not be made to feel the pressure of the demand for their exchange into gold again. Whatever be the cause, the fact remains that the public before the War always had more confidence in the notes of a bank than in paper money issued by the government, and the result was that most governments had entirely given up the issue of paper money, and had handed over the issuing of bank-notes to certain banks under strict legislative control. During the War many countries, like ourselves, went over to government issues of paper money, but most of them have since reverted to the system of note issues by a Central Bank.

Having now dealt with the three functions of a banker as an account keeper for its customers, as a dealer in capital, and as the issuer of bank-notes, it becomes necessary to consider the position of the bank with regard to its various customers, debtor and creditor, and to make up its balance sheet of assets and liabilities as follows: Its assets are its own capital, its investments, its advances on discount of bills and other securities, and its cash balance or reserve. Its liabilities, on the other hand, are its deposits and current accounts, and its note issue if any. The point to be noted in comparing the two sides of this balance sheet is that although the assets may largely exceed the liabilities, the latter are nearly all due on the spot or at short notice, while most of the assets are only realizable after more or less delay. Its bills discounted, for example, are only due at certain dates, and although they are falling due and being paid every day, it is impossible for the bank to anticipate payment,—unless some other bank will re-discount the bills for it. In case of a run on the bank, therefore, the bank has only one asset to fall back upon immediately, viz. its cash. For the bank bases its whole business on the assumption that normally only a certain proportion of its customers will want their money back at any given time. If they had to keep all their customers' deposits lying waiting, on the off chance that they might be wanted, there would be no possibility of doing business at a profit, and the customers would require to pay the banks a premium for keeping their money safe, instead of receiving interest on their deposits. The banks have learned by experience that in normal times they may safely lend out all but a certain proportion of their deposits, but they must keep a certain part always at hand in actual cash to meet the ordinary requirements of the business, and something over to provide for unusual requirements. In other words, in addition to keeping a certain amount of what they call 'till money', that is to say actual money for the day's turnover of cash, they must always have at hand a reserve of available funds in case their customers should happen to require more than their usual for a time. This reserve, then, becomes the pivot of the bank's whole business, and it is a very difficult problem to know just how much of a reserve the bank ought to keep, and how to keep it, that is to say, how to prevent its being drawn upon too rapidly in times of difficulty. The natural desire of the bank's shareholders is to keep the reserve as low as possible, because money lying unemployed, as the reserve must, is purely unproductive capital. On the other hand, the reserve is the sole security for the ability of the bank to meet all possible claims that may be made upon it *immediately*, and that is the one thing essential to a bank, because the slightest hesitation in paying what is asked for would at once alarm all its depositors and bring them clamouring to the bank for their money, which otherwise they would never have thought of withdrawing. Self-preservation, therefore, dictates the keeping of an adequate reserve, while the desire to earn dividends points to its reduction as low as is compatible with safety. How, then, are these conflicting interests balanced?

CHAPTER VIII

THE ENGLISH BANKING SYSTEM

A. BEFORE THE WAR

The Bank of England.—The Other Banks.—Lombard Street.—Where they got their money and what they did with it.—The Bank Charter Act, 1844.—The Issue Department of the Bank of England.—Regulation of bank-note issues in other countries.—The Banking Department.—The Weekly Return.—The Reserve.

THE whole banking system of the modern commercial world before 1914 was so largely dependent on the banking system of London, which in turn was centred in the Bank of England, that it is necessary, in order to understand the banking system as a whole, to examine the English system first. The world's financial system is perhaps the most complex and many-sided organization ever seen, and it can only be understood by getting at the core of it first and working outwards. It is a simple statement of fact that before the War that core lay in the small area of about a square mile which houses the great London Money Market, and it was no exaggeration to describe the building of the Bank of England, the 'Old Lady of Threadneedle Street', which is the centre of that area, as the hub of the financial universe.

The financial system of London may be divided into three parts, which may be described as concentric circles. There was first the Bank of England itself, which is the pivot of the whole system; next, in the inner circle were all the 'Other Banks', as they are called, of Great Britain, meaning all the Joint Stock Banks and the comparatively few private banks still remaining, which make up the banking system of Great Britain. For in order to understand the growth of the English system it must be realized that in England, before the War, the financial system was specialized or divided between home and foreign business. Roughly speaking, the British banks as such did not touch foreign business.

Finally, in the outer circle was a heterogeneous collection of financial institutions of all sorts, generically known as Lombard Street or the Outside Money Market, which was distinguished from the inner circle by the fact that it did the greater part of the foreign monetary business of London, though this must not be taken to mean that it did not do a share of the home business too. It did both and was the connecting link between home and foreign business, as well as between the Bank of England and the Other Banks. The name is an indication of the history of the system. In the thirteenth century the Lombards, coming in the first place as agents to collect the Pope's taxes, settled down in this part of London and began to carry on their traditional business of money-lending and also foreign exchanges and marine insurance. Thus the quarter which subsequently became the home of the goldsmiths, the first English bankers, acquired its name, which has ever since been synonymous with money. Lombard Street itself is a small street running off among seven others from Bank Corner, the famous centre of London's business quarter, and probably the busiest street-corner in the world. Every one of these streets, for half a mile or so from the Bank itself, is crammed with the offices of financial houses and branches of banks from every country in the world. Every bank of any importance in the world has a branch or agency, if not its head office, within this small circle, to which as a whole the general title of Lombard Street is applied.

The method of inquiry into this enormous and complicated system is indicated by the line of thought suggested at the close of the previous chapter. The essence of a bank's business is receiving and lending money or dealing in floating capital. The best method of attacking the problem is therefore to follow out these two sides, by putting the inquiry into two questions: 'Where did the banks get their money?' and 'What did they do with it?' At the same time the vertical division, as it might be called, of the London system into home and foreign business must also be kept in mind.

I. Where the Banks got their Money

A. *The Bank of England.*

Home sources. In the first place, the Bank of England was in every sense of the term, except the name, the national or government Bank. It held all the accounts of the various departments of the government; it managed the National Debt; it was the representative of the Mint, and generally speaking it exercised all the functions of a State bank. But it was one of the paradoxes of the English system that the Bank of England so far as its constitution and control are concerned was entirely a private institution, theoretically at least. Officially the government had no control over it whatever, not even a representative upon its directorate; but as a matter of fact the final say in all its affairs really lay with the government, while its actual policy was dictated entirely by the public interest, so far as the directors could ascertain it. From the present point of view the importance of this privileged position of the Bank is that it held all the government accounts, which at times amounted to enormous sums.

Many large business houses, public companies of all kinds, and even private persons also kept accounts with the Bank of England, and these were classed in the Bank's Weekly Return as Other Deposits. There was, however, a radical difference between the Bank of England and all others, in respect that it paid no interest on private deposits. Its total deposits, therefore, were not nearly so large as its position otherwise would indicate. The great bulk of the private deposits in England was held by the Other Banks.

One of the most important contributions to the deposits of the Bank of England arose from the fact that all the Other Banks made it an invariable custom to keep a considerable balance with the Bank of England as their own reserve. This was in fact the outstanding characteristic of the English system, which was known as the 'one reserve' system. Instead of each bank keeping its own reserve, they all lodged it with the Bank of England, which thus became in a very peculiar sense the bankers' bank. This fact again illustrates the solidarity and centralization of the English system. All the banks supported the Bank of England by giving it their deposits (without interest be it remembered) in normal times. They thus established a certain claim on the Bank for special assistance to any bank that might find itself in temporary trouble; and this claim was fully recognized not only by the Bank of England itself, but by all the other banks, for they clearly recognized that they all stood or fell together. A serious run on one bank, necessitating its suspension, would almost inevitably, in times of financial nervousness, produce a run on other banks, and the effect of such a panic would be cumulative. If one bank went, others were almost certain to follow.

Finally, the relations between Lombard Street and the Bank of England were so close, especially in times of strain, that most of the foreign bankers, bill brokers, and other financial institutions in the Outside Money Market made a practice of keeping a balance in normal times with the Bank of England.

Foreign sources. These were on the whole similar in character to the home sources, the only difference being that their origin was foreign. Thus many foreign governments had at times large sums at their credit with the Bank of England, because London was almost the only centre for raising large government loans.

Many foreigners of all kinds, from crowned heads downwards, also kept accounts with the Bank of England, because the Bank of England was just about the safest place in the world in which to keep one's financial sheet-anchor. One could always be sure of getting payment as and when it was wanted in London, in gold if required, which was not always true in other countries, especially in times of crisis. Only once in the history of the Bank before the War had this not been literally true, during the suspension of gold payments due to the Napoleonic Wars.

Many private firms in foreign countries, and especially foreign banks and foreign merchants, also kept accounts with the Bank of England because so much of their financial business found its way to London for final settlement, and an account there was very convenient, wherever one might want to make payments. A London cheque was welcome anywhere, because under normal conditions there were always many who required to remit to London, and who were glad to get such a cheque.

It is difficult, however, to distinguish between this kind of private deposits by foreigners in the Bank of England and those already mentioned as home receipts by the Bank from Lombard Street, for many of these deposits, though actually foreign in their origin, would naturally be paid to the Bank by the representatives in London of the foreign owners.

B. *The Other Banks.*

Roughly speaking, the British Banks, as already indicated, confined themselves to home business and received all their funds from private deposits. But even before the War some of the large London Joint Stock Banks had been doing an increasing share of the foreign business which comes to London, and had received considerable deposits from foreign sources of the kind above described in the case of the Bank of England. Their funds were mainly derived, however, from British private depositors, and the amount of these deposits in all the banks of the United Kingdom (excluding the Bank of England) before the War was nearly £1,100 millions. (See Table X.)

C. *Lombard Street.*

Lombard Street, like the Bank of England, also drew its supplies both from home and abroad. The Outside Money Market included not only the representatives or branches of foreign banks and other financial institutions abroad, but also all kinds of purely British houses, some of which were engaged mainly in foreign business, but many others just as largely in home trade. Discount Houses, both home and foreign, Accepting Houses, originally foreign, and all sorts of other interests were established in London, because Lombard Street was the one place in the world which provided the quickest, and therefore the most profitable, market for money. There you could either borrow or lend money, as your position for the time being required, on the shortest possible notice, and to almost any amount. Lombard Street was the meeting-place of the world's supply of and demand for floating or loanable capital. Every one who had money to spare, even for the shortest period, could send it in to Lombard Street as 'call money', and receive a small rate of interest on it even for the few days or weeks that he could allow it to remain. Such money, received from large financial institutions of all kinds, insurance and investment, and even commercial and industrial companies as well as the banks proper, was the chief source of Lombard Street's funds; but they also had the control from time to time of large funds belonging to the foreign banks and merchants which many of them represented.

II. What they did with the Money

A. *The Bank of England.*

The drains upon the Bank of England's funds, or the employments found for them, were chiefly for home purposes, though many of them were really the result of foreign requirements. Taking the actual home needs first, the Bank had often to advance money temporarily to the government on what were known as 'Ways and Means Advances', when certain expenditure had to be met before the funds to meet it from taxation had yet been fully collected; or again, one department might be heavily out in its expenditure while another had large funds at its disposal.

The Bank being, after all, an ordinary private concern, employed some part of its spare funds in the ordinary lending business of a banker, that is to say on the discount of bills, loans on stock exchange securities, and other similar kinds of financial business; but, owing to its peculiar position, the Bank in normal times did a comparatively small proportion of the total business of this kind done daily in London. The reason was that the Bank, being the Central Reserve Bank of the whole English system, had to keep a much larger proportion of its total deposits in reserve than any of the Other Banks, which, as already explained, looked to the Bank of England to fulfil this function for the whole system. In normal times the Reserve amounted to about 50 per cent. of the whole liabilities of the Bank to its depositors both public and private, and the necessity of maintaining this large proportion in reserve naturally restricted its ordinary lending business. But the peculiarity of the Bank's position was that, while in normal times it did only a comparatively small share of the discount business, in times of difficulty the whole strain of the Money Market's requirements was thrown upon it. Apart from such times of crisis the Bank did a considerable business at times with the Lombard Street houses who came to it for funds when their ordinary supplies were temporarily insufficient; and in this way, as will be seen later on, the Bank was able to exercise a very powerful control over the position of the Money Market as a whole.

B. *The Other Banks.*

The employment of their funds was mainly confined to home business. They employed a considerable proportion of their funds, as much as they thought safe in view of the nature of their liabilities to their depositors, in lending to merchants, manufacturers, stockbrokers, &c., on discount of bills, on overdrafts or cash credits, and on the security of all kinds of valuable and quickly realizable property, stock exchange securities, &c., in which they also invested part of their funds directly. But it was generally regarded as unsafe for them to invest in home trade. Discount Houses, both home and foreign, Accepting Houses, originally foreign, and all sorts of other interests were established in London, because Lombard Street was the one place in the world which provided the quickest, and therefore the most profitable, market for money. There you could either borrow or lend money, as your position for the time being required, on the shortest possible notice, and to almost any amount. Lombard Street was the meeting-place of the world's supply of and demand for floating or loanable capital. Every one who had money to spare, even for the shortest period, could send it in to Lombard Street as 'call money', and receive a small rate of interest on it even for the few days or weeks that he could allow it to remain. Such money, received from large financial institutions of all kinds, insurance and investment, and even commercial and industrial companies as well as the banks proper, was the chief source of Lombard Street's funds; but they also had the control from time to time of large funds belonging to the foreign banks and merchants which many of them represented.

II. What they did with the Money

A. *The Bank of England.*

The drains upon the Bank of England's funds, or the employments found for them, were chiefly for home purposes, though many of them were really the result of foreign requirements. Taking the actual home needs first, the Bank had often to advance money temporarily to the government on what were known as 'Ways and Means Advances', when certain expenditure had to be met before the funds to meet it from taxation had yet been fully collected; or again, one department might be heavily out in its expenditure while another had large funds at its disposal.

The Bank being, after all, an ordinary private concern, employed some part of its spare funds in the ordinary lending business of a banker, that is to say on the discount of bills, loans on stock exchange securities, and other similar kinds of financial business; but, owing to its peculiar position, the Bank in normal times did a comparatively small proportion of the total business of this kind done daily in London. The reason was that the Bank, being the Central Reserve Bank of the whole English system, had to keep a much larger proportion of its total deposits in reserve than any of the Other Banks, which, as already explained, looked to the Bank of England to fulfil this function for the whole system. In normal times the Reserve amounted to about 50 per cent. of the whole liabilities of the Bank to its depositors both public and private, and the necessity of maintaining this large proportion in reserve naturally restricted its ordinary lending business. But the peculiarity of the Bank's position was that, while in normal times it did only a comparatively small share of the discount business, in times of difficulty the whole strain of the Money Market's requirements was thrown upon it. Apart from such times of crisis the Bank did a considerable business at times with the Lombard Street houses who came to it for funds when their ordinary supplies were temporarily insufficient; and in this way, as will be seen later on, the Bank was able to exercise a very powerful control over the position of the Money Market as a whole.

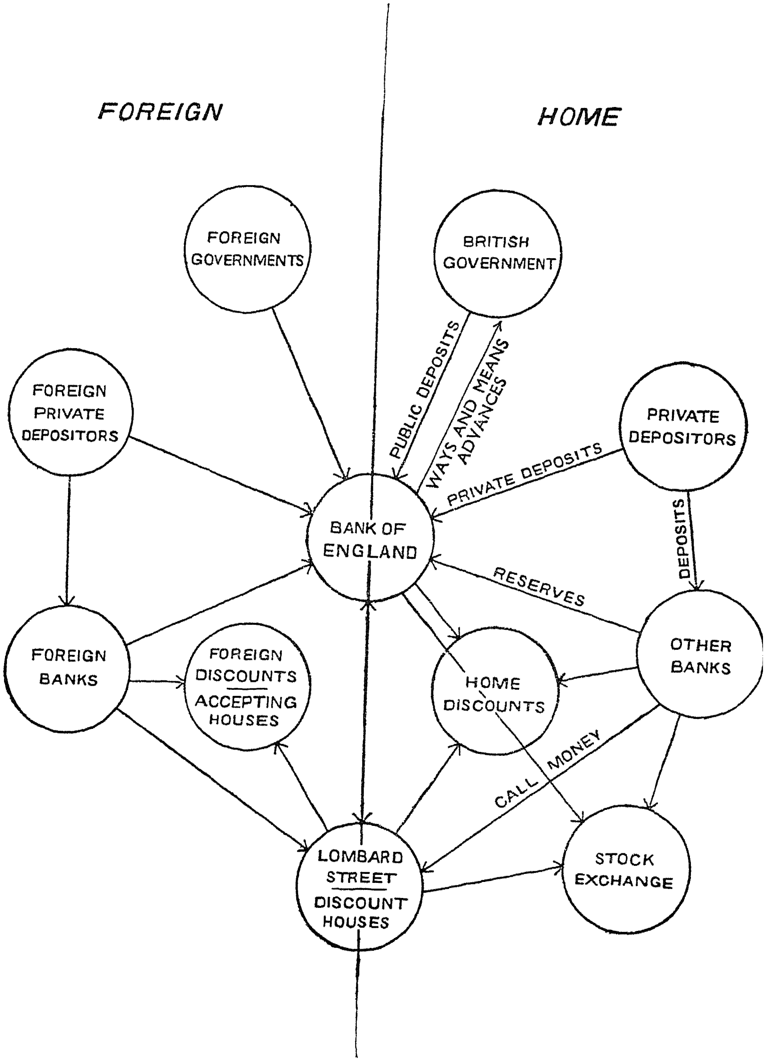
B. *The Other Banks.*

The employment of their funds was mainly confined to home business. They employed a considerable proportion of their funds, as much as they thought safe in view of the nature of their liabilities to their depositors, in lending to merchants, manufacturers, stockbrokers, &c., on discount of bills, on overdrafts or cash credits, and on the security of all kinds of valuable and quickly realizable property, stock exchange securities, &c., in which they also invested part of their funds directly. But it was generally regarded as unsafe for them to invest in land or immovable property, because at a time of difficulty, such as a financial crisis, or when there was a run on the bank, such securities could not be realized quickly enough. Of the rest they sent a comparatively small portion to the Bank of England as a reserve, and the remainder, or the greater portion of it, was lent to Lombard Street, 'on call', that is to say, as Call Money, to be used by them in the short loan market already described.

C. *Lombard Street.*

The Outside Money Market would lend money to any one who had good security to offer, and on almost any kind of security. Their main business was the discount of bills both home and foreign, but they also lent money for all sorts of purposes and for any time from the shortest periods, even overnight or for the week-end, upwards. The rate of interest they received on such short loans was comparatively low as a rule; but the rate they paid for the call money was lower still. They worked on small margins of profit, and their whole business was to keep their money constantly employed. This business was world-wide in character and distribution. The business of discounting foreign bills, which was entirely in their hands, requires some further explanation on account of the part it plays in other matters to be dealt with later on. Suppose that a merchant in Buenos Aires wished to buy lace goods from a Nottingham manufacturer. Some method of payment must be arranged, because the Nottingham man knew nothing of the foreigner, and could hardly be expected to give credit to a total stranger. The apparently simple way was for the Argentine to send the money with the order, but he might not be able to pay in advance; or he might not care to trust the manufacturer. What he did, therefore, was to offer payment by bill of exchange, say at three months' date, against receipt of the bill of lading for the goods. This, however, would not satisfy the exporter; he must have some sort of guarantee that the buyer was good for the money, and that the bill would be met when due, and so the custom had grown up in London of certain large firms who had connections abroad lending their names to such bills as guarantors by accepting the bill for the foreign buyer. This they did for a commission paid them by him, and because they knew, or were informed by their house in Buenos Aires, that he was good for the money. These 'Accepting Houses' then, as they came to be called, had become middlemen of a sort between the manufacturer and his foreign customer. When the goods were ready for shipment the manufacturer sent the bill of lading for the goods to the forwarding house in London along with the bill of exchange for their value. The latter was presented to the Accepting House for their signature, upon which the bill of lading for the goods was handed over. Then the bill of exchange could be discounted either with an ordinary bank or with one of the Discount Houses in Lombard Street, which lent the money willingly on the double security of the Accepting House and the manufacturer himself, who as drawer of the bill was of course ultimately liable. Thus the business of foreign discounts in London had gradually become specialized or divided between these two classes of firms, the Accepting Houses and the Discount Houses, and the two together represented a large part of the business done in Lombard Street.

In the diagram on page 86 an attempt is made to represent, something after the fashion of a wheel and its spokes, the ramifications and interrelations of this complicated system. The principal point to be noted in the description of the system is how the whole organization was centred in the Bank of England. The Bank, in addition to its own ordinary current accounts and deposits, held the reserve of all the Other Banks; it also held the government funds and often balances belonging to foreign banks and foreign governments also. Thus the responsibility of the Bank, not only to England, but to the financial world as a whole, was very heavy, and it is all the more



THE ENGLISH BANKING SYSTEM BEFORE THE WAR paradoxical that, as already pointed out, practically no government control over the Bank should have been found necessary. The actual control over the Bank's affairs was exercised by the public opinion of the whole Money Market, which would certainly be enforced if necessary by the government. This idea of the position occupied by the Bank of England and its responsibilities was more than anything due to the work of one man, Walter Bagehot (1826–77), who in his book called *Lombard Street,* originally published in 1873, was practically the first to set forth the real constitution of the London Money Market and the true place of the Bank of England in it. When his work was first published he was describing an ideal, but the ideal had every year become more and more actual.

The modern legislation affecting the Bank of England began with the Bank Charter Act of 1844, commonly called Peel's Act, and that only deals in detail with the one question of note issue. How that came to be so involves a brief account of the history of the Bank of England from its foundation.

The Bank of England was founded in 1694, but the development of banking in Europe which led up to its foundation had been going on for several centuries before that date. The earliest banks in Europe were those of the Italian Republics which are said to date back to the twelfth century, though the famous Bank of St. George at Genoa was only definitely established in 1407 and the Banco di Rialto in Venice in 1587. The first bank in Western Europe was the Bank of Amsterdam, founded in 1609, followed by the Bank of Hamburg in 1619, and the Bank of Rotterdam in 1635, and the first bank-note was issued by the Bank of Sweden in 1656, two years after its establishment. In England the banking system only began to develop early in the seventeenth century. Up to 1640 the merchants of London had been in the habit of keeping their uninvested funds in the Tower of London under the care of the government; but in that year Charles I seized a sum of £130,000 lying in the Tower, and thereafter the merchants, not trusting the government, developed the practice of lodging their funds with the goldsmiths. These had already begun to extend their original trade of artificers in the precious metals, by acting as money-changers and also as dealers in capital, lending at interest part of the funds deposited with them. They paid interest on these deposits and issued notes of hand acknowledging them, which were practically deposit receipts. In spite of the usury laws they charged high rates of interest on their loans, and they also made considerable profits by their money-changing transactions. In these days the irregular state of the coinage made banking a highly skilled and remunerative profession, involving careful consideration of the weight, standard, condition, and value of every coin handled; it is said, for example, that when making payments the goldsmiths paid out the most worn or debased coins, keeping the best for use as bullion.

From 1640 onwards the government from time to time received advances from the goldsmiths acting as bankers; but in 1672 the Exchequer stopped payment, being at that time in debt to the goldsmiths to the extent of £1,300,000, and thus again destroyed all confidence on the part of financial men in the government. Public confidence in the goldsmiths and private banking firms into which they were then developing—some of the private bankers of the present day can trace their origin to the old goldsmiths of those days—had been shaken by frequent failures among them, and from about 1651 tracts had appeared in England advocating the formation of a public chartered bank on the lines of those which were already in existence in other parts of Europe.

In 1694 the government of William III was in urgent need of funds, but owing to their bitter experience with his predecessors, none of the London merchants would trust the government with a loan. It was then that a Scotchman named William Paterson came forward with the scheme which led to the formation of the Bank of England. He offered to lend the government £1,200,000 on condition that they granted him a Royal Charter for the incorporation of the Bank, with the right to carry on all the business of bankers, including deposits and discounts, and conferred upon the Bank the right to issue notes to the extent of the sum lent to the government. Thus began the modern National Debt of England.

In 1697 a new charter gave the Bank of England the monopoly of joint-stock banking in England, and this was further strengthened by the Act of 1708, which restricted the number of partners in banks of issue to six during the continuance of the Bank of England. In 1751 the Bank took over the management of the National Debt. The granting of this monopoly to the Bank of England is the key-note to the history of the subsequent development of banking in England. From this point onwards the development of the English system may be compared with the entirely different system in its immediate neighbour Scotland, as illustrating two opposite ideas of the kind of body which should be entrusted with the functions of a banker. In England, with the exception of the Bank of England, the banking business was carried on entirely by private banks, that is to say by private firms composed of a number of individual partners under firm-names composed of the names of these partners or some of them, and usually ending with '& COMPANY',—hence the form still in use in crossing cheques. Public confidence in these banks was largely based on the faith of the public in the integrity and stability of the private individuals composing the firm, and this naturally restricted the operations of the bank to the town or district where the partners were known. As the Bank of England confined itself entirely to London and had at first no branches throughout the country, it practically meant that all the banking business of the country was localized, each town or district having its own local bankers. In Scotland, however, a different system began to develop at an earlier stage than in England. A number of large joint-stock or incorporated banks were formed, that is to say, joint-stock or shareholding companies incorporated by Royal Charter, such as the Bank of Scotland in 1695, the Royal Bank in 1727, and the British Linen Company in 1746. These large concerns established branches in many of the chief towns of Scotland, and their reputation became firmly established throughout the country. Thus the two systems may be described as a large number of small, local private bankers throughout the country in England, while in Scotland it was a small number of large joint-stock banks with branches covering the whole country.

The chief event in the history of the Bank of England before the Act of 1844 was the suspension or restriction of cash payments during the Napoleonic Wars. Till then the use of banknotes in England as common currency had been greatly restricted by the large denomination of the notes issued. At first the lowest amount of any note was £20. In 1759 £15 and £10 notes were authorized, and £5 notes in 1793. With the suspension of cash payments in 1797, however, the need of smaller notes was at once obvious, and £1 notes were immediately issued in considerable quantities. The crisis which was the immediate cause of the suspension soon passed, and the Bank would have been quite willing to resume cash payments; but so little objection was there to the note system that no one asked for its discontinuance, and the suspension was prolonged. At first the issue was comparatively small, only some £10,000,000 in 1797, and it was not till 1809 that there began to be any suspicion of inconvenience attached to the note issue. Then it began to be realized that gold had gone to a premium, the price rising to about £4. 12*s.* per ounce in 1809[1] instead of the official price of £3. 17*s.* 10½*d.* Financial people began to talk about the high prices, which were then prevailing,[2] being due to inflation caused by the excessive issues of paper money throughout the country, for although the

---

[1] See Smart, *Economic Annals of the XIXth Century,* vol. i, p. 238.

[2] See Table V.

Bank of England issue was still only about £19,000,000 the private banks throughout the country and in Ireland had increased their issues enormously. A Bullion Committee was appointed in 1810 which marked the beginning of a tremendous controversy, the very meaning of which it is now almost difficult to comprehend. The truth is that the financial world of those days was only feeling its way by experience to a realization of the meaning and principles of money, and it is largely to those discussions that we owe our very clear-cut ideas as to the principles and functions of money. But from our present point of view the chief importance of this controversy was that out of it grew the alternative principles which formed the basis of the later controversy over the question of the best method of regulating the Bank of England's note issue. The Restriction itself was finally removed in 1819–23, by which time the new currency of 1816 was in being; but the lessons of the controversy were still to be applied to banking problems.

From 1790 to 1820 there had been growing dissatisfaction with the English system owing to the disastrous frequency of failures among the private banks. Between 1810 and 1817 alone there had been 157 of these, and a considerable agitation was growing in favour of some approximation to the Scotch system of joint-stock banks. In 1823 a pamphlet was published by one Thomas Joplin in which he pointed out a fact which had apparently not been fully realized till then, namely, that the Bank of England's monopoly only prevented the establishment of joint-stock banks *with the right to issue notes*, and that if any one cared to establish a joint-stock company to carry on the other parts of a bank's business there was nothing to hinder him doing so. But, as things were then, the impossibility of obtaining a note issue was sufficient to prevent the establishment of any other joint-stock banks, because in those days the issue of notes was looked upon as the most important and certainly the most profitable part of a bank's business. The fact is that banks as they are now did not exist then. The development of the system of current accounts and payment by cheque was still in its infancy, but no one then could have conceived that banking business would develop on the lines and to the extent which it has since done. Indeed, that development is very largely just the result of the history which is being narrated. No one, however, paid much attention to Joplin's pamphlet at the time, but in 1824–5 there was another series of bank disasters, seventy-six of them failing, and in 1826 a new Act was passed which allowed joint-stock banks to be established with the right of issue, so long as they had no office or branch within sixty-five miles of London, this being the first establishment of the metropolitan area which afterwards became the Bank of England's absolute preserve for note issue purposes. This same Act once more raised the minimum value of bank-notes to £5, and an attempt was made to extend this provision to Scotland, which, however, was successfully resisted, fortunately for Scotland, thanks largely to Sir Walter Scott.

In 1833 when the Bank of England's Charter again came up for renewal, the view which had been advocated by Joplin was specifically adopted in the wording of the new charter, and immediately the development of the great modern joint-stock banks of London began apace. But the unstable character of the provincial joint-stock banks which possessed the right of note issue still attracted public attention from time to time to the question of the regulation of note issues, and finally the matter came to a head in the great controversy which preceded the passing of Sir Robert Peel's Bank Charter Act of 1844. The principles underlying the arguments of the two sides were known as the Currency and the Banking principle respectively. The former maintained that no security for a bank-note issue could be satisfactory except the retention of actual currency in reserve or 'earmarked', as it is called, for the conversion of the notes when required. The advocates of the banking principle, however, maintained that bankers could be relied upon to restrict the issue within safe limits, because the nature of banking business provided a natural limitation to the issue, notes being issued only on actual commercial transactions representing a bona-fide need for currency. In reply to this it was argued that experience during the suspension of payments had shown that excessive issues were not so checked; during the South American boom in 1809, for example, owing to enormous loans by the banks on discounts, the amount of the issue rose dangerously high. It must be remembered that in those days the Bank did not possess one very powerful weapon which it now uses successfully when necessary, and which will be explained in Chapter X, namely the right of raising the rate of discount, or, in other words, charging more for its loans in order to check an excessive demand. In those days the usury laws were still in existence and the maximum rate of interest chargeable, namely five per cent., was not nearly high enough to check excessive borrowing in times of excited speculation. It is hardly worth while discussing now, however, whether, under the extended use of this means of self-protection, the Bank of England might have developed on better lines. The fact is that the Currency party triumphed, and the Act of 1844 tied up the English bank-note system under such restrictions as completely prevented its further growth, and so resulted in diverting the development of the English banking system along entirely different lines from what might otherwise have been the case.

The leading principles of the 1844 Act were first, that the issue of bank-notes should gradually be monopolized in the hands of the Bank of England, and, second, that that issue should be limited to a fixed amount against securities, all the rest being against full gold cover only. To secure the first, it provided that no bank having an office in the metropolitan area of 65 miles round London was to be allowed to issue notes, and that in the provinces of England no new joint-stock bank was to be allowed to begin issuing notes—Scotland and Ireland were accorded special treatment—while the future issue of those which already had the right of issue was to be limited to the amount of their actual issue at the time of the passing of the Act. The Bank of England was divided into two entirely separate departments known as the Issue Department and the Banking Department respectively; the former was to do nothing but issue notes, the latter to carry on the whole banking business of the Bank. The regulation of the Bank's note issue was laid down as follows: The actual issue at the date of the Act was taken as £14,000,000 and this amount they were to be allowed to issue in future against securities, including the amount which the government then owed the Bank, which was about £11,000,000. This sum of fourteen millions was to be known as the Authorized Issue. Beyond this the Bank could issue as many notes as they pleased, so long as the full value of them in bullion was deposited with the Issue Department. Silver to the extent of one-fourth of the gold was allowed by the original Act; but in modern times the Bank never exercised its right to hold silver. The notes of the Bank of England were legal tender in England only (not Scotland and Ireland) except of course at the Bank itself.

With regard to the existing issues of the provincial banks, both private and joint-stock, it was further provided that should any such bank fail or give up business or become amalgamated with another its authorized issue should forthwith cease, and it would be within the right of the Bank of England by Order in Council to have two-thirds of the lapsed issue added to the amount of theirs. As showing how effectual this policy had been in centralizing the note issues of England in the Bank it may be mentioned that in 1844 the provincial issues in England amounted to £8,631,642 issued by 207 private and 72 joint-stock banks; in 1917 they had fallen to £258,870 issued by one private and eight joint-stock banks. By the addition of their share of these lapsed issues, the authorized issue of the Bank of England had been raised before the War to £18,450,000, which was over a million less than the full two-thirds of the lapsed issues.

This stringent regulation of the Bank's note issue was very severely criticized for many years, and there can be no doubt that it was the main cause of the English banking system following the lines of development which it actually chose. The weakness of the system was its absolute inelasticity at times of crisis when more cash is wanted. Notes would serve the purpose, but the Bank could not issue a single note except against gold, which was quite useless. This rigid restriction of the development of the issue of notes has therefore compelled the adoption of an entirely different system, namely the use of cheques instead of notes, and there is much to be said for the argument that that has proved to be in the long run a better system.

It is interesting before leaving this part of the subject to note the various alternative systems of regulation of note issue adopted in other countries. These are three in number, namely:

(1) The principle of the fixed ratio, that the number of notes issued must be covered by gold and securities in certain fixed proportion. This was the German system, for example, the proportion being one-third gold[1] and two-thirds securities, but there a special provision was made that the bank could exceed the fixed proportion on paying to the government a tax of 5 per cent. on any notes in excess. This heavy tax was thought to be sufficient to prevent any danger of over-issue.

(2) The principle of maximum issue. This was the French system, where the total issue was limited before the War to 6,800 million francs, and there was no provision at all as to the amount of gold to be held. That was left to the prudence of the bank. But the Bank of France, which issues these notes, was under severe legislative restriction as to its ordinary banking business.

---

[1] Afterwards raised to 40 per cent.

(3) Practically the whole amount of the note issue is covered by the deposit of securities, as in America till 1914.

The only provision made by the Act of 1844 with regard to the Banking Department of the Bank of England was that the Bank must publish every Thursday an account, known as the Weekly Return, showing the position on the previous day of the whole accounts of the Bank, including both the Issue Department and the Banking Department. A specimen of this Weekly Return will be found in Table XI.

It is very important that this account should be really understood, for its publication every Thursday at noon was awaited with the greatest interest, and the announcement of the Bank Rate which was then made, depending upon the figures of the account, went far to control the value of money, and the movement of floating capital throughout the world. The pivot of the whole matter was the strength of the Reserve and its proportion to the total amount of the liabilities it might be called upon to meet. It is essential in the first place to be quite clear as to what the Reserve really is, because in the lay mind there is constant confusion as to what the Reserve consists of, and where it is kept. Especially, confusion is very common between the Reserve which is part of the assets of the Banking Department, and the gold held against the notes by the Issue Department. These are two entirely different things, and they appear in different parts of the Weekly Return. The last two items on the credit side of the account of the Banking Department, namely 'Notes' and 'Gold and Silver Coin', are the Reserve. But the confusion is excusable when it is pointed out that though as a matter of fact the Reserve was mostly in notes, yet when it required to be drawn upon, the call was generally for gold. The Banking Department, however, for its own convenience and to save the necessity of having a duplicate set of safes each capable of housing many millions of gold, preferred to let the gold lie in the Issue Department and take out notes instead. If gold was wanted, all they had to do was to send a bundle of notes across to the Issue Department, when they would get the gold at once. This explains the distinction between Total Issue and Circulation. The latter is the total amount of notes issued by the Issue Department, less the amount held as Reserve by the Banking Department, that is to say it is the amount of notes actually in the hands of the public other than the Bank.

The next question is 'How did the Bank contrive to maintain the Reserve so steadily at the figure of about 50 per cent. in normal times?' In other words, how did the Bank of England manage its Reserve, upon which so much depended? As already mentioned, the calls upon the Reserve which the Bank must always be prepared to meet could be divided into two main classes, home and foreign. The home drains, as they were called, were for the ordinary currency requirements of the country, which inevitably fluctuate a good deal from time to time, as for example at the quarter days when large numbers of periodical payments such as rents are due, or at the half-yearly dividend days when many companies pay their shareholders. Again, a time like the August Bank Holiday, when so many people go on holiday, meant a heavy withdrawal of cash from the banks to meet expenses, and this involved a considerable outflow of cash from London to the provinces. But the important characteristic of these home drains was that they were regular or periodic; their usual amount, and the time when they are expected, were well known from experience, and could be estimated with a reasonable approach to accuracy. They were therefore easily provided for, and did not cause any trouble; because the Money Market did not in the least mind even large sums of money being drawn out of the Bank of England's Reserve, as long as it knew where they had gone to and what for, so that it could estimate when they would return.

But with the foreign drains it was often quite different. Some, like the autumnal drain of gold to Egypt and India for the movement of the crops, which had become well known as annual events before the War, were looked forward to and recognized as quite normal. But there was another kind of foreign drain of gold from the Bank which was the constant care of the London Money Market because it was much more difficult to foresee when it was likely to come, or to know where it came from, how long it would last, or what amount it would rise to, and especially when the money was likely to come back. These foreign drains were therefore very difficult to provide for, and often caused great disturbance in the Money Market, especially if some unknown drain of this sort happened to coincide with another large drain for other purposes. It is necessary therefore to find out the cause or origin of these foreign drains, before considering further how they affected the Reserve and how they were to be dealt with; and to do so the inquiry must be diverted to an entirely different branch of the subject, namely, foreign trade and the foreign exchanges.

B. SINCE 1914.

British Banks and foreign business.—Clearing Banks' statistics.—Window-dressing.—Amalgamations.—Authorized Issue.—Currency Notes.—Discount Market.

Though the preceding section is in the past tense it must not be thought that the description of the English Banking System there given is entirely a thing of the past. On the contrary, the essential structure of the system remains substantially unchanged, but there have been certain modifications which while apparently only affecting points of detail have, perhaps unintentionally, resulted in very great changes in the working of the system.

The greatest changes in the system, especially in regard to the relation of the English Banking System to the world's financial system, have of course resulted from the suspension of the gold standard in England from 1919 to 1925 and again in 1931, followed by the establishment in 1932 of the Exchange

Equalization Fund which has since been copied more or less by every other nation of financial importance. The result has been to set up an entirely new organization of the financial relations between different countries, especially as regards the movement of gold and the control of the foreign exchanges, but as this involves so many matters which have not yet been dealt with, it must be left to a later chapter. In the meantime, perhaps the most surprising fact is that in spite of all that has happened, London is still the most important financial centre in the world.

As already indicated, even before the War the Other Banks had begun to take an increasing part in the foreign banking business which always came to London, and some of them had even established branches in foreign countries. As the result of post-war developments this movement was greatly strengthened and all the Big Five now have 'affiliated companies' in various foreign countries as well as in the Dominions and Colonies. The counterpart of this is the increasing amount of foreign business done by the Other Banks in this country, including not only large amounts of foreign deposits held directly by British banks, but also the important part taken by them in the discounting of foreign bills.

Another important development with regard to the Other Banks has been the creation of a system of published statistics with regard to their working. Until 1921 very little statistical information was available as to the position of the Joint Stock Banks and the uses they made of their funds. Every bank of course published an annual balance sheet and most of them also a half-yearly balance sheet, but as these were all made as at 31st December or 30th June, which are abnormal periods in financial circles, they did not necessarily represent the average position of the banks throughout the year. Table XIII (*a*) summarizes these half-yearly balance sheets from 1913 to 1920.

In January, 1921, however, more or less under compulsion from the Government, the London Clearing Banks began to publish every month a summary of the leading items of their balance sheets based on the average of one day in each week of the month. The details given in these monthly returns since 1931 will be found in Table XIII (*c*). In 1931 the Committee on Finance and Industry, known as the Macmillan Committee, compiled a table of monthly returns of the London Clearing Banks which gave a great deal more information. Deposits were divided into 'Current Accounts' and 'Deposit Accounts'; the item of 'Cash in Hand and at the Bank of England' was split up into its two constituents; 'Money at Call and Short Notice' was divided into 'Money at Call', 'Money at Short Notice to the Money Market', and 'to the Stock Exchange'; Discounts were divided into 'Treasury Bills' and 'Commercial Bills'; and they carried all these details back to 1919, which is important because it covers the period of post-war inflation and the beginning of deflation. As these details are of great interest they are summarized in Table XIII (*b*).

It will be noticed from a comparison of the 1919 and 1920 quarterly figures in section (*b*) with the half-yearly figures in section (*a*) that there is a marked difference between the half-yearly figures and the average throughout the year. This is in accordance with the known fact that the banks naturally made their position look as strong as possible in the half-yearly balance sheets. When the monthly returns were established it was thought that this feature of 'window-dressing' would be greatly minimized, if not entirely eliminated, but the joint-stock banks adopted a practice which went far to defeat this object, for they arranged among themselves that they would not make up their weekly returns on the same day of the week, the Big Five especially doing it on different days. The result was that each bank, on its making-up day, by calling in a considerable amount of its Call Money from Lombard Street, made its cash position look much better than it would otherwise have done. Each day in turn, therefore, one bank would be calling in, and next day releasing their Call Money, while another bank called in. The result was that the total 'Cash in hand and at the Bank of England' of all the Clearing Banks was made to look considerably larger than the actual facts, and the Macmillan Committee called attention to this in their report and estimated that the difference amounted to a floating fund of at least £20 millions. The extent of this difference, however, was not brought out until, in 1928, the new form of the Bank of England Return began to separate their 'Other Deposits' into 'Bankers' and 'Other Accounts', and it was then found that the total bankers' deposits at the Bank of England, which included all the banks, was consistently less than the amount of balances at the Bank of England returned by the Clearing Banks alone. This can be tested by comparing Table XIII (*b*) with Table XII, which gives an Analysis of the Bank of England's Weekly Return.

This system of weekly calling brought out more clearly than ever the peculiar position of the Outside Money Market as the link between the Other Banks *inter se* and between them and the Bank of England. Thus the Other Banks never borrow from each other; they simply call up their Call Money from the Discount Houses and leave them to find the money—from another bank. In the same way the Other Banks do not borrow directly from the Bank of England; they call up their Call Money from the Discount Houses, and if they cannot replace it from another bank they will have to go to the Bank of England and pay Bank Rate. In this way the Bank of England indirectly controls the value of money throughout the whole of the Banking System.

The War also produced a marked intensification of the movement which had begun previously for the amalgamation of the smaller banks, especially the private banks, into larger groups and the absorption of even some of the major groups into still larger units or combinations. The result was the emergence of the Big Five above referred to. In 1938 there were eleven Clearing Banks whose capital was 98 per cent. of the total capital of all the joint-stock banks in England and Wales, while the capital of the three remaining private banks was only £2,100,000.

One result of this was the complete disappearance of the private note issues, the last disappearing in 1921. Thereupon the Authorized Issue of the Bank of England was raised to £19,750,000 in 1923.

To the man in the street the greatest apparent change in the banking system was the emergency issue in the first week of the War of Treasury Notes or Currency Notes for £1 and 10*s*. as described in the latter part of Chapter X. These were finally merged with the Bank of England's Note Issue in 1928 subject to certain modifications of the existing system, particularly the introduction of greater elasticity in the Fiduciary Issue which has proved to be capable of quite unexpected applications. At the same time the opportunity was taken to make certain changes in the form of the Bank's Weekly Return. All these changes are described in detail in Chapter XIII.

As the result of post-war developments a great change has taken place in the work of the Discount Market. The whole business of discounting commercial bills, both home and foreign, has shrunk to very small dimensions, but its place has been largely taken as the result of the development of war finance by Treasury Bills, which formed the greater part of the Floating Debt during the War and have ever since continued to mount up to a very large total. These are now the chief business of the Discount Market. Incidentally, the Accepting Houses almost lost their separate identity through the diminution of the business in foreign bills and have now become merged in the Money Market as a whole, which is no longer divided into Accepting Houses and Discount Houses.

It is remarkable that no attempt has been made to bring the working of the Outside Money Market within the scope of the statistical requirements applied to the Other Banks. Three of the principal Discount Companies are limited companies and must therefore publish annual statements, but that is all.

CHAPTER IX

THE RATE OF EXCHANGE

International trade a return to the system of barter.—The law of the balance of trade.—Foreign bills and the Rate of Exchange.—Course of Exchange.—Variation of the Rate of Exchange.—Its effects and its limits.—Gold points.—The cause of the foreign drain.

In the inland trade of modern commercial countries the use of metallic coinage in commercial transactions has, as already explained, been reduced to a minimum. In foreign trade this tendency is carried still further. International trade in normal times is carried on almost entirely without the passing of money; it is really a return to the system of barter. Every country exports just as much as is required to pay for its imports, and imports just as much as it can buy with its exports.[1]

It is obvious that this must be so; because if any nation were importing persistently more than it exported, and paying for the excess every year in gold, its gold supply would soon be seriously diminished and, according to the Quantity Theory of Money, there would be a general fall of prices in that country. The result would be that, first of all, every one would be very short of money, owing to the fall in prices and consequent depression of trade, and would be compelled to reduce his purchases, especially of foreign luxuries. Prices being now so cheap at home, it would not pay to import anything that could be bought at home, because the home prices would be cheaper than the foreign. Thus the current of importation would be checked. At the same time the cheap prices at home would tempt foreigners to come and buy, thus giving an impetus to exports. The result would be to redress the balance of trade by reducing imports and increasing exports, until the excess of imports, which was the beginning of the trouble, was wiped out. It is therefore impossible for any country to be always importing more than it exports and paying for the excess in gold (except of course a country like South Africa which produces gold), and the same process reversed would apply in the case of a persistent excess of exports. The very fact of an excess either way would tend to check itself. The result is embodied in what is called the law of the balance of trade. *Every importation, when it takes the form of a regular current, necessarily provokes and determines a corresponding exportation, and conversely.*

---

[1] See 'Science of Prices', Chapter XVI, as to Visible and Invisible Exports and Imports.

It will be apparent, however, that the operation of the theory above stated would be a slow and inconvenient process. It would be some time before the reduced supply of coinage would have its effect on prices, with the resulting compensatory action. Again, the frequent variation of the general level of prices is very bad for trade. In practice, however, the same result is reached by a more delicate and at the same time much more rapid process, known as the variation of the rate of exchange, which, though invisible and automatic, is equally certain under normal conditions.

The system of settling accounts between foreign merchants by the exchange of bills is a development of the credit system as seen in the banks. Just as in inland trade all the merchants settle their accounts with the bank instead of with each other direct, so in foreign trade, each merchant, instead of settling with his own creditors in various foreign countries, settles with his creditors' creditors in his own country, thus saving the passing of coin, with all its necessary risks and expense.

Thus supposing that A in London buys £100 worth of cotton from B in Bombay, and grants a bill in payment, while C in Bombay buys £100 worth of goods from D in London, and grants a bill in payment. Suppose that the bills fall due on the same date, say January 31. Before that date A in London must remit to B in Bombay the sum of £100; C in Bombay must remit to D in London the sum of £100. But A meets D and says, 'Instead of sending £100 out to Bombay to pay B, I will give it to you in exchange for the bill payable by C which you hold. Then I shall send this bill to my creditor B, who will collect payment of the amount from your debtor C.' Thus all parties' accounts are squared without any money passing from England to India or the reverse.

In practice a middleman is employed, called the bill broker, who buys bills from all the exporters who have them to sell, and sells them to the importers, who require them to pay for their imports. The bill broker's price is the rate of exchange, which is simply the price of foreign bills, and his price list is called the course of exchange.[1] How, then, is this price fixed?

First of all, it must be explained how the equilibrium or normal price, as it might be called, of foreign bills between two countries is fixed; then it will be necessary to consider the causes of variation from this equilibrium, or par value.

(1) In trade between countries whose coinage is based on the same unit the exchange is the simplest possible. Between England and the Colonies, for example, where the English sovereign is the universal unit, there was before the war no par of exchange in the ordinary sense of the word at all, for an English sovereign was exactly the same thing as an Australian sovereign.

(2) Where two countries use different coinage units, the rate of exchange is based upon the comparative gold values of the coins which form the respective units of their coinage. The rate of exchange between London and Paris, for example, that is between the sovereign and the franc, before the War was calculated thus:

One English sovereign = 7·98805 grammes[2] of gold $\frac{11}{12}$ths fine
∴ ,, ,, = 7·32238 ,, ,, pure gold.
One Napoleon (20 francs) = 6·45161 ,, ,, gold $\frac{9}{10}$ths fine
∴ ,, ,, = 5·80645 ,, ,, pure gold.
∴ One English sovereign = $\frac{7\cdot32238\times 20}{5\cdot80645}$ francs = 25·2215 francs.

---

[1] See Table XIV.

[2] 123·274 grains (troy) and 1 gramme = 15·4323 grains.

This was called the mint par of exchange between London and Paris; one English sovereign was equal to 25·22 francs.[1]

(3) Where the currency of a country actually consists of paper, the mint par of exchange of the nominal gold unit of the currency must be converted into terms of paper money by finding out how many units of paper money are equal to one unit of gold, but that of course will vary constantly. Again, with a silver currency and a nominal gold unit, a similar method would be followed. But between a gold standard country and one with a silver standard there is no calculable par of exchange at all. The rate of exchange in such a case depends mainly on the fluctuations of the market value of silver in terms of gold.

When the bill was not due immediately, but say three months after date, an allowance had to be made on the price of that particular bill to cover the interest for the period till its maturity. The long rate of exchange, as this was called before the War, used to be quoted for three months bills, as opposed to the short rate or cheque rate for bills payable immediately. The difference between these two obviously depended on the rate of interest current for the time being in the country where the bill was payable. In practice, the probability of the bill being duly paid, in other words, the solvency of the granter, must also be taken into account, but, as the rate of exchange refers only to thoroughly good bills, it is not affected by this consideration.

But over and above all these considerations, the principal cause of the variation of the rate of exchange remains to be explained. The rate of exchange means the price of foreign bills, which, like that of any commodity, depends on the supply and demand. The supply of bills depends on the number of merchants who have sent out goods from the country and have received bills in payment; the demand for bills depends on the number of merchants who have brought goods into the country and must buy bills to meet the price of these imports. In other words, the supply of, and demand for, bills depend on the balance of imports and exports for each country. If a country is importing more than it exports, the rate of exchange rises against that country; if it has been exporting in excess of its imports, the rate of exchange falls in favour of that country.

---

[1] See Chapters XIII and XVI as to the post-war history of the franc.

Before proceeding to discuss the effects of the variation of the rate of exchange it is necessary to explain a peculiarity in the methods adopted of quoting the rate of exchange. Every such rate can be stated in two different ways, either as the amount of *home* currency which must be *given* in exchange for the standard unit of the other country, or as the amount of the *foreign* currency which will be *received* in exchange for the standard unit of the first country. Thus the rate of exchange between London and Paris is invariably expressed both in London and Paris as the number of francs given or received for £1 sterling, but it might just as well be expressed as the number of pence equal to one franc. Now the movement of the actual figure which is called the rate of exchange depends on which of these two methods is adopted. If the rate is expressed in foreign currency then it means the amount of that currency received in exchange for one unit of the home currency, and in that case a rise in the figure means that we receive more of the foreign money for the same quantity of ours, in other words the rate of exchange has become more favourable to us. Since the War, nearly all the rates of exchange are quoted in the foreign currency (see Table XIV) so that when the quoted rate is falling the rate of exchange is moving against us.

When the rate of exchange moves against a country in this way, it means that importers must pay a little more for their bills than they expected. This is the same as if they had had to pay a slightly higher price for the goods imported. On the other hand, it means that exporters receive a little more than they expected for their bills, which is the same as if they had received a rather higher price for their goods. In other words, an unfavourable rate of exchange is a penalty on imports and a premium on exports. It therefore tends to check the excess of imports and to encourage exports; it automatically tends to restore the balance of trade, the disturbance of which was the primary cause of the rise of the rate of exchange. Thus the variation of the rate of exchange tends to preserve the balance of trade.

But there are limits to the rise or fall of the rate of exchange. The root idea of the buying and selling of bills was to save the risk and expense of sending gold abroad. If, however, the loss incurred owing to the movement of the rate of exchange becomes very great, it will no longer pay to buy bills; it will be cheaper to send the gold after all. The rise and fall of the rate of exchange are therefore limited by the cost of sending gold from the one country to the other. The limits thus fixed are called the gold points. Thus before the War the rate of exchange between London and Paris could not fall below 25·12 nor rise above 25·32, because the cost of sending gold from London to Paris, or *vice versa*, was only about 10 centimes per £. These, then, were the gold points of the exchange between Paris and London.

The result of the rate of exchange touching the gold points is that merchants, or the banks on their behalf, will remit gold instead of buying bills. This is what is meant by the expression that the movement of the rate of exchange against a country is unfavourable to that country; if it continues it will result in a drain of gold abroad. This, however, in spite of the word unfavourable, is not necessarily a bad thing for the country; the phrase recalls the idea of the Mercantilists, who thought that an export of bullion was the one thing to be avoided. During the nineteenth century these ideas had come to be looked upon as old fashioned, but to-day by a curious change of psychology (the result of protection) an unfavourable rate of exchange is regarded by many people as desirable because it means a penalty on imports and a premium on exports.

We return now to apply this result to the question which we were formerly considering—the maintenance of the Bank of England's Reserve. When the rate of exchange moved against London, it meant that English importers would soon require to send gold abroad. But there was only one store of gold in the country, the Reserve of the Bank of England. This, then, was the cause of the foreign drain on the Bank Reserve. It was due to a call for gold to meet foreign payments, the need for such payments arising from the fact that imports had been in excess of exports; in short, the foreign drain was due to an excess of imports. How then was the Bank to deal with such a drain?

CHAPTER X

A FINANCIAL CRISIS

A. BEFORE THE WAR

The protection of the Reserve.—Raising the Bank Rate.—Its effect on the foreign drain and on the home money market.—Course of a crisis.—Suspension of the Bank Act.

THE movement of the rate of exchange towards the gold point was a warning to the Bank to expect a drain of gold for foreign payments. How was the Bank to deal with such a foreign drain? There were two sides from which it could approach the question; it could take steps either to prevent gold being drawn out of the Reserve, whether for home or abroad, or to induce more gold to come in from abroad.

The first course seems the simpler. The Bank might stop discounting; it might refuse to lend any more money on home discounts until the foreign drain on the Reserve stopped. But this was impossible, because if the Bank of England were to refuse to lend money on its usual class of security, this would immediately be accepted by the market as proof of something seriously wrong, and would lead to the very thing the Bank wished to avoid, namely, a crisis. To refuse gold for export was equally impossible, for London had always been the free gold market of the world; and it was largely to this that it owed its commanding position in the money markets of the world.

But while the Bank could not refuse to lend, it could take steps to discourage borrowing, either for home discounts or for export, by raising the rate of interest charged on loans. This is what was called raising the Bank Rate. The Bank Rate is the official minimum rate of discount, the lowest rate at which the Bank will lend on the security of first class bills, though in normal times the Bank was willing to lend to its own regular customers at the market or 'street' rate, which is generally a little lower than the Bank Rate. It was compelled to do so in order to avoid losing its customers altogether.

At the same time the raising of the Bank Rate served the second purpose also. By common custom the Other Banks regulated the rate of interest which they paid on deposits more or less closely by the Bank Rate. When the latter rose, the rates of interest on deposits were also increased, and this tempted an inflow of spare money from the country to the banks. This found its way to London and tended to make the conditions of the money market easier all round, for the Other Banks would have more money to put out at call in Lombard Street, which meant that the latter had less need to go to the Bank. Further, the raising of the rate tempted gold from abroad, because money always tends to go where it can get the best remuneration, and if the rate of interest is higher in London than in other countries, money will tend to flow from them to London. This stopped the foreign drain and might even set up a counter inflow of gold into England. Thus by one operation, the raising of the Bank Rate, the Bank secured both its objects: it reduced the borrowing on the one hand and tempted an increased supply of money both from home and abroad on the other; and if a little time could be given for this to work itself out, there need be no alarm, and certainly no crisis. But unfortunately this time could not always be got, because the raising of the Bank Rate caused serious inconvenience to all kinds of people at home. It meant that every one who required to borrow money not only had to pay a higher rate for it, but had greater difficulty in getting money at all, for all the Other Banks, fearing trouble ahead, began to strengthen their position by reducing, as far as possible, the amount of money they had out on discount or on loans, at the same time as they were offering a higher rate of interest on deposits so as to tempt increased deposits. Those who were supposed to be in difficulties were the first to be cut off; their loans were called up or they were refused further loans, and this might lead to their bankruptcy. Their fall involved others, and every failure made matters worse. Business men began to get nervous and suspicious of their neighbours; credit, upon which the whole financial edifice is built, was beginning to fail. Merchants wanted payment in cash, instead of giving the usual credit, partly because they themselves were requiring the money, and partly also because they were doubtful about the position of their debtors. Thus the difficulty went on increasing, until some important house, or perhaps even a bank, failed. Then the uneasiness increased to a panic, and the crisis was in full swing. The failure of one bank made the public suspicious of the others. A mere rumour might be enough to start a run on any bank, which might bring it down. Thus public confidence was entirely upset; credit had ceased to exist; everybody wanted currency now.

What was the effect on the Bank of England? The Outside Money Market, upon which the ordinary borrowers usually depend, was no longer available. The Other Banks had called in their money from Lombard Street, which had now no money to lend, and could only get it by borrowing from the Bank of England. At the same time, the Other Banks had reduced their lending business to the lowest possible point. Every one was therefore thrown back on the Bank of England, and the strain upon it was enormous; it had to do all the lending work of the whole market, of which it formerly had only a comparatively small share. At the same time, those who used to supply it with funds were withdrawing them. The Other Banks, for example, required to draw upon their reserves deposited with the Bank of England in order to meet their own liabilities, and might even have to borrow from the Bank to tide them over a difficulty. Thus the strain on the Bank was twofold: its supplies were practically cut off, while the work it had to do had been enormously increased.

And the Bank could not refuse to lend; to do so would precipitate a crisis. It might raise the rate, but it must go on lending more freely than ever; it must do all the work of the Other Banks and the Outside Market, as well as its own ordinary business, and that at a time when its supplies were less than ever.

The Reserve, of course, sank rapidly, and would soon be wiped out altogether if matters came to a crisis too quickly, that is, before the raising of the Bank Rate had time to produce its proper effect by stopping the foreign drain and setting up a counter influx of gold into the country from abroad. Whether this would happen or not depended mainly on the general condition of the country at the time. If trade was good, and there had not been too much speculation or inflation of prices by credit, then the chances were that the storm would be safely weathered. But if the financial position of the country was bad, if there were many firms already in difficulties, then the immediate result of the restriction of credit might easily be to bring such firms down. Uneasiness spread rapidly under such conditions, and soon grew to panic. It was all a question of time. If things moved slowly the Bank would be able to deal with the difficulty; but if they could not get time the Reserve would be very quickly exhausted, and—what then? The lower the Reserve fell the more excited the public became, for the Reserve was regarded as the barometer of financial solvency. The Bank, then, must play for time, but on several occasions the game failed, and the Reserve was reduced to vanishing point. What was to be done in such a case?

The strange thing about these financial crises was that, even at the worst, there was never any sign of the public losing faith in the notes of the Bank of England. On the contrary, at such times the number of notes in circulation always increased. Every one wanted currency, and the notes were as good as gold. But when the gold and notes in the Reserve were exhausted the Bank could not pay out any more. It could not issue more notes, because it could not get any more notes from the Issue

Department except in exchange for gold, and it had no gold to give. The Bank, therefore, must simply stop payment. But that was impossible. The whole financial system of the country was centred in the Bank of England, and the stoppage of the Bank as already explained would mean the bankruptcy of the government and of every business man in the country, besides, probably, the bankruptcy of half the other governments of the world.

What else could it do? The crux of the difficulty was that the public wanted currency, and, failing gold, they were quite willing to take notes. But the Bank Act prevented the Bank issuing more notes. The Bank directors therefore went to the government and explained the position. The government practically gave them permission to disregard the provisions of the Bank Act for the time, to issue more notes against securities, instead of gold, and promised to introduce into Parliament at the earliest possible moment a Bill of Indemnity to save the Bank from the consequences. This was called the Suspension of the Bank Act, and its effect was miraculous. The moment it was announced that the Act was suspended, the crisis collapsed, and so quickly that only once, in 1857, did it ever become necessary to issue the extra notes at all. The mere intimation that the Bank Act was suspended was sufficient to calm the fears of the public and stop the crisis.

To sum up, the position of the London Money Market was most peculiar. It was entirely founded on credit and the actual amount of metallic money used to carry on its work was exceedingly small. As long as credit was good the system worked very well, but if anything happened to impair credit the whole system was in danger. The public had got into the habit of regarding the Bank Reserve as the barometer of credit and when, owing to a foreign demand for gold, the Reserve fell slightly, there was no need for any alarm: the raising of the Bank Rate would soon put things right again. But if the condition of the market and of industry generally throughout the country was not sound, the market could not stand the strain of the high Bank Rate, and some people got into difficulties. That kind of thing only needed a beginning; one failure led to another, suspicion became general, and the mischief was done. Credit was gone and people began to want money, gold or notes, who before were quite content to take cheques or bills or to let their money lie in a bank or in some business. The root of the difficulty was not that the actual amount of gold in the country had been seriously reduced; the total amount of the foreign drain was a comparative trifle. It was because, owing to the panic, people at home began to want currency who never wanted it before; because the demand for cash had gone up enormously, not because the supply had gone down.

And for this there was practically no cure. Careful regulation of the Reserve, keeping its amount as high as possible, tended to improve the stability of the system. But the only thing that could really alter the position was the spread of a better understanding of the system among all those who had to do with it. The more enlightened policy adopted by the directors of the Bank since the days of Bagehot made a great difference, and the public were every year becoming better informed and less likely to cause difficulties by foolish panic. At the same time these periodic crises served a useful purpose. They tested the soundness of the country's trade, checked over-speculation or undue inflation of credit, and weeded out the unsound concerns, leaving the country, once the crisis was past, in a sounder and healthier condition.

B. THE CRISIS OF JULY–AUGUST, 1914

A pre-war crisis.—No foreign remittances.—Effect on the Accepting Houses, Discount Houses, Stock Exchange, and the banks.—Foreign exchanges.—Currency and gold.—The Bank Holiday.—Moratoria.—Treasury notes.—Marine insurance.—Prices.—Food panic.—Relief measures.

It is interesting to compare the course of what may be called a normal pre-war crisis in the London Money Market, as above described, with the experience of the extraordinary war crisis which swept over London and all the financial markets of the world in the memorable last week of July 1914. That crisis was abnormal not only in its extent and seriousness, but also in its causes, and in the measures which had to be adopted everywhere to meet it.

On Tuesday, July 28, 1914, Austria declared war on Serbia, and the declaration was followed immediately by a panic on all the Bourses of the Continental countries. This, however, did not at first attract very much attention in England, except in financial circles, because similar panics had taken place on the outbreak of the Balkan Wars of 1912 and 1913, and these had not seriously disturbed the world's markets outside of the Continent. The man in the street had not yet realized the danger of England being dragged into this War, and he did not see why our business world should be seriously affected by what he imagined to be purely a Continental disturbance.

The situation developed very rapidly, however, and on Thursday, July 30, all the Continental Stock Exchanges were closed, except the Parquet or official market in Paris. That day happened also to be Pay Day of the periodical Settlement on the London Stock Exchange, and seven firms of stock brokers in London and two in Glasgow were 'hammered' or declared defaulters. The fact that one of the London defaulters was a firm with very large German and Continental connections was the first indication of the quarter from which trouble was approaching so far as England was concerned. It became known that during the period of this settlement Germany and other Continental countries had been buying heavily on the London Stock Exchange; and, now that these transactions had to be settled, difficulty was being found in getting the necessary remittances through to London. This difficulty was becoming general. Accepting houses in Lombard Street were not receiving the usual remittances from their debtors abroad, especially on the Continent, to meet the bills which fall due every day to an enormous total; and they were being put to serious difficulty to meet their own obligations in London. At the same time there was serious trouble on the London Stock Exchange. The heavy sales from the Continent, which had been unloading stocks to an unprecedented extent both on London and New York, these being now the only Stock Exchanges open, had of course caused prices to fall very heavily. The banks, which as a rule finance so large a part of this business, became alarmed, and not only discontinued further loans on stock exchange securities, but also began to call up or reduce existing loans, which they would have had to do in any case owing to the fall in values. One of the penalties of the system of loans on a margin over the current value of securities is that on a falling market the effect of forced sales is cumulative. The lower prices go, the more shares are thrown on the market; prices are again forced down by these forced sales, and so on.

The London Stock Exchange became absolutely demoralized; prices were tumbling down and no one could say what was going to happen. This inevitably reacted very quickly on the London Money Market as a whole. Every one was short of money to meet current obligations, and on going to the bank was met with restricted credit instead of the enlarged facilities required. The Discount Market was almost at a standstill by this time, and the only place where it was possible to get any money was at the Bank of England. When the Directors met as usual on Thursday the position was serious, but apparently they did not wish to precipitate matters by too drastic action, and they only raised the rate from three to four per cent., a fact which to many people outside London seemed to offer reassurance as to the true state of affairs, though this very quickly proved deceptive. Before the day was out, however, it must have been evident to those who were well informed as to the state of affairs in London that things were much more serious than was indicated by a four per cent.

Bank Rate. On Friday morning the storm broke. The settlement on the Paris Stock Exchange was postponed, which was practically equivalent to closing the Bourse, and the London Stock Exchange only opened in the morning to close again at once, a thing which had never happened before in its history. New York did the same as soon as the five hours difference of time had passed; and the crisis was at its full height. Most of the Produce Exchanges throughout the world were compelled to do the same, especially the Cotton Exchanges of New Orleans, New York, Liverpool, Havre, Bremen, Alexandria, and Bombay, and only the Wheat Exchanges, which could not be allowed to close owing to the urgent character of their supply, remained nominally open, though they were utterly disorganized by the breakdown of the financial system. The directors of the Bank of England met again on Friday, which has only happened once before in living memory, and raised the Bank Rate at one jump from four to eight per cent. The Discount Market was by this time practically non-existent; but the Bank of England followed its traditional policy and was still lending freely, though of course at very high rates.

The foreign exchanges, which had been the beginning of the whole trouble, were in a state of the wildest confusion. To make matters worse, the difficulty had arisen at a time of the year when all the world normally owes London a great deal; in America, for example, the great wheat and cotton crops had hardly begun to move, and it is with the proceeds of these crops that countries like America meet their obligations to London. It so happened that America was also specially indebted to London at that particular time, because America, like the Continent, had been buying securities in London, and had now to meet these payments. Thus America, like the Continent, was requiring to remit unusually large amounts to London, and the rush to obtain remittances on London became unprecedented. The foreign exchanges had already begun to establish records by the Thursday. After that all quotations became absolutely nominal. Exchange was practically unobtainable, and the most extraordinary offers, such as 6½ dollars per £ instead of the normal 4·86, were said to have been made without avail. One ship was dispatched with gold for London, but being a German ship she had to make for a neutral port on the declaration of war.

The sudden rise in the Bank Rate was the first intimation to the general public of the serious character of the crisis, but before this became generally known they were beginning to feel the difficulty in another and very peculiar way. The August Bank Holiday was approaching—it fell on Monday, August 3, and as usual most people in London were going on holiday on the Thursday or Friday before it. When they went to the bank to draw money for their expenses they were taken aback to find that the banks would only pay in Bank of England notes, which are of course legal tender in England. Now, for ordinary holiday expenses a five-pound note, which, it will be remembered, has been since 1826 the lowest denomination of bank-note available in England, is far too large; and the holiday-makers wanted change, that is to say, gold. But some of the joint-stock banks, apparently desiring to conserve their balances of gold, demurred about giving gold, referring some customers to the Bank of England for change; and on the Friday the unprecedented sight was seen of long queues of people waiting at the Bank to get change for their notes. Nothing contributed so seriously to the popular idea of the gravity of the crisis. It began to be suspected that for the first time in history the public were becoming uneasy about the Bank's notes. Such a suspicion, had it been well founded, would have been the end of all things; but fortunately it was not so. All that was wanted was change, and the sudden restriction of the gold supply at a holiday season brought to the front, what Scotchmen had long preached, the inconvenience of having nothing in England like the Scotch one-pound note. But the difficulty, though not so tragic as it at first appeared, was serious enough. By the Friday change for a five-pound note was almost unobtainable.

But if the Bank Holiday contributed to the difficulties of the position in one way it saved the situation in another. On Saturday morning the City was practically in a state of collapse. The Bank Rate was raised to ten per cent., not so much because that made any great difference to any one, but rather because it was a tradition that the Bank Rate should go to ten per cent. before the Bank Act was suspended; and so far that was the only course that any one could conceive as the way out of the difficulty. The Discount Market was at a standstill, partly, at least, owing to the action of the Other Banks in refusing loans and calling up their money, though, as will be seen shortly, there was a deeper cause than that also at work. But the Bank of England was still lending freely, though at maximum rates of discount; the Reserve was sinking, and it seemed to be only a question of time when it would be exhausted, if things went on as they were doing. In any case, Saturday being a short day, followed by the Sunday and then the Bank Holiday on Monday, gave the financial world and the government time to measure the situation, and decide what was to be done to cope with it.

The first business was to be clear as to the cause of the crisis, and there was fortunately no difficulty in putting one's finger on a single fact which was at least the immediate cause of the trouble. In one way the crisis was like others that had happened before: it was due to the complete collapse of the world's credit system, which indeed is just what a crisis means, in one form or another, in every case. The credit system, as has been pointed out, is a highly nervous organization, its action or failure being due very largely to psychological causes, and, whatever may be the immediate cause of any crisis, its development generally follows the same lines; the failure of credit produces similar results whatever may have been the cause of the breakdown. But the interesting point in this case was the cause of the first breakdown, and it was in this respect that the crisis of 1914 was markedly abnormal, and indeed unique. The beginning of the trouble usually was difficulty in London owing to a withdrawal of gold on foreign account, but in this case it was the reverse; it was the action of the Continental banks in refusing to part with their gold for remittances to London which paralysed the foreign exchanges and made it impossible for Continental debtors to remit to London. The moment that happened all the rest followed inevitably. The object of the foregoing account of the World's Money Market system has been to make clear its extraordinarily complex character, to show how every section of it is closely interrelated with every other, and how every one depends on every one else for the due fulfilment of current obligations. A can only pay B if C pays A punctually, and so on. Now the first effect of the inability of the Continental debtors to pay their bills in London was that the Accepting Houses, who had guaranteed these bills to the Discount Houses, were faced with immediate bankruptcy, because, as their remittances had not come to hand, they could not pay their creditors, the Discount Houses. At the same time the failure of remittances from the Continent to members of the London Stock Exchange made the stock brokers unable to fulfil their obligations to their fellow members in connection with the purchase of shares, and sent them post haste to the banks and Discount Houses to borrow money on these shares to carry them over, if they could not sell them. Again, the Continental debtors, in their honest desire to pay their debts to London, turned to the only other alternative—they tried to sell shares in London; but the pressure of these sales at once began to depress values on the London Stock Exchange and produced further difficulties. As soon as prices began to fall seriously the Other Banks necessarily began to call in their loans and sell out their 'cover'. At the same time they found it necessary to reduce their loans on securities, for the banks were suddenly finding themselves very badly pinched at another point. Their bills discounted were not being met when due, owing to the failure of the Accepting Houses to meet them, which in turn was due to the failure of their remittances from abroad. Thus the banks were compelled to reduce their new loans and discounts, because their daily supply of money was not coming in as usual. But worst of all for the banks was the fact that owing to the disorganization of the Discount Market they were unable to get in their Call Money from Lombard Street, and in this way their most liquid asset was suddenly frozen and not available. It was a very serious predicament indeed in which the banks found themselves, and any criticism that may be made of their action in the crisis must be tempered by due recognition of the fact that their position was really almost desperate. For they had to face the risk, indeed it was almost a certainty, of a run on them by their depositors, which would have been inevitable by the beginning of the week, not so much because their customers had lost faith in the banks, but simply that their current requirements for cash, swollen by the sudden collapse of credit, would very quickly exhaust the available resources of the banks, reduced as these now were.

It was therefore a very difficult situation all round which had to be faced, and the government found it impossible to devise and carry out the measures necessary to meet it even in the time made available by the Bank Holiday. Their first step, therefore, was to declare a prolongation of the holiday for another three days, which, in effect, was equal to a complete moratorium for that period, for during Bank Holidays no bill can be presented for payment, nor can any steps be taken to enforce payment of practically any obligation whatever.

The first task which lay before the government and its advisers was to relieve the Accepting Houses from their impending bankruptcy. This was done by a partial moratorium issued on Sunday, August 2. But this was only passing the burden on to another branch of the Market, namely the

Discount Houses, and anything that would relieve them could only be at the expense of the Market generally, especially the banks. The position of the latter was so precarious that practically nothing but the right to refuse payment to their own creditors would meet the difficulty; but that, of course, was again only shifting the burden on to the shoulders of the general public. Thus there was nothing for it but to proclaim a general moratorium, and this was done on Monday, August 3.

The next step was to meet the sudden need for actual currency, especially small change. There was no time to discuss the best way to do this: it was simply a question of finding some method which could be adopted quickly enough to meet the emergency. Even the provision of the necessary stock of the right kind of paper was a difficulty, and finally the machinery used for printing Bank of England notes was turned on to a stock of the paper usually employed for postage stamps, and an emergency currency of £1 and 10*s.* government legal tender notes was ready for issue when business was resumed on the Friday after the prolonged Bank Holiday. This new stock of 'money' enabled the government to solve two difficulties at once. It met the public need of change; and it enabled the government to lend large sums of money to the banks to meet any possible run that might take place on them when they reopened. But no such rush took place; everything passed off quite quietly and the first stage of the crisis was over. The Bank Act was officially suspended on August 1,[1] though by that time it could do no good, and a clause was inserted in the new Currency and Bank Notes Act which practically gave the Treasury power to suspend the Act themselves at any future time if necessary, thus avoiding the necessity for an Act of Indemnity on each occasion.

But these measures marked only the first stage of what was required to deal with the crisis. They were simply emergency measures to stop the panic: they did nothing to remove the root causes of the crisis, which, as a matter of fact, had not yet reached its full development. For the outstanding fact which must be emphasized at this stage was that up till Saturday, August 1, when the first stage of the crisis was at its height, the War had in a sense not begun at all. No two of the Great Powers of Europe had actually declared war upon each other till Russia and Germany led off on that date; and at that time it was still by no means certain that England would be involved in the War at all. On the contrary, there was a very strong party in England which would have resisted England's participation in the War to the utmost, had it not been for Germany's invasion of Belgium, and that did not become a public certainty till the Monday. Thus the crisis was essentially a pre-war crisis up to this stage; and the point to be emphasized is that it would have happened just the same even if England had never come into the War at all. England was involved in the crisis not because she was to be one of the belligerents, but because London was the centre of the world's financial system.

---

[1] For the actual letters see Spalding, *The London Money Market,* p. 232.

But before these first measures were in force England did find herself inevitably involved in the War, and the second stage of the crisis had begun. The effects of the declaration of war upon the industries of England were bound to be very serious. In the first place the government practically commandeered the whole railway system of the country for mobilization purposes, and for a few days it was almost impossible to move goods of any kind, except military, from one part of the country to another. At the same time shipping, upon which England's industries so largely depend, was practically at a standstill. This again was due to causes of a semi-financial character. The ordinary marine insurance policy held by ship-owners and merchants to cover the risk of loss of their ships and goods at sea, does not cover war risks, which are specially excepted by the terms of the policies. When, on the first rumours of war, owners rushed to cover their property against the extra risk, the facilities available for insurance even in London, which was the centre of the world's marine insurance business, were very rapidly exhausted, and even before the declaration of war by England, marine insurance against war risks was practically unobtainable. When war was actually declared the situation became simply a deadlock. No one knew how things were going to turn out, what naval strength in fighting ships or armed merchantmen Germany might have at large, or what success the British navy would have in dealing with them or in bottling them up. For a shipowner to send a valuable ship and cargo to sea uninsured against war risks under such circumstances would have been courting disaster, and most of the owners, except in the case of the regular lines, postponed their sailings till events would develop. Ships at sea made for the nearest port, and those in port remained in safety awaiting developments. Thus, even if it had been possible for manufacturers and exporters to get their goods to a shipping port, there was no possibility of getting them away, and this of itself would very quickly have brought trade almost to a standstill.

Perhaps the most regrettable feature of these early days of the War was the food panic, for it can hardly be described in milder terms, which swept over the country, and which, though it was very quickly checked, had one most interesting result. The development of highly organized modern markets has produced a remarkable uniformity of prices throughout the area of the market, but under the strain of war conditions this system, so far as retail prices were concerned, broke down completely for a time. Prices were all at sixes and sevens; shopkeepers did not know what to charge for their goods, because they did not know what it would cost them to replace their stocks when these were exhausted, and in many cases they found it impossible to replace them at all for the time being. Purchasers were at the mercy of the shopkeepers, some of whom simply charged whatever prices they thought they could obtain. It was a complete reversal of the ordinary conditions of the determination of market price in England, under which, as a rule, the prices of most commodities are fixed by cost of production. The system in normal times works by competition through the common knowledge on the part of every one, both purchasers and shopkeepers, of what every one else is charging. But under the rapid changes from day to day, which were now taking place, it was hardly possible for the shopkeepers even to know what their immediate neighbours were charging. Left pretty much to himself, each man charged what he thought fit; and the result was that the uniformity of prices which was always regarded as characteristic of Western methods almost disappeared. Prices were mainly influenced by demand rather than supply, and the shopkeeper regulated his charges more by what he thought his customers would pay than by the price he himself had paid for the goods. It was a striking revelation of the extent to which the fixing of prices in normal times had become simply a matter of custom.

The effect on the position of the large manufacturing industries of England was much more serious. At first no one knew what to do, and most people took the precaution to restrict their commitments as much as possible by cancelling delivery orders for goods, wherever it was open to them to do so, and placing no new orders. The manufacturers in many cases did not object to cancellation, because they did not know what to do for raw materials, which were undeliverable even if it had been possible to buy them. Many of the cotton manufacturers, for example, could only get delivery of their raw cotton by sending motor wagons to the docks or stores for it, over long distances in many cases. But the trouble was not so much the impossibility of getting goods as the difficulty of knowing what price it would be safe to pay for them. Prices of course fell very rapidly at first, except in the case of those goods directly required for war purposes, such as woollen materials, leather, &c. In the cotton trade, for example, the position was very serious. Every one expected that the trade would have a very bad time, unemployment was at first very serious, and the price of the raw material fell so alarmingly that no one could tell where it would stop.

To add to all these difficulties the manufacturers found business almost paralysed by the difficulty of getting their usual financing facilities. The banks were still in a serious difficulty, for though the moratorium had stopped the panic, it had not touched the root of the matter, which was that so much of the money usually available for carrying on the financing of the country's trade was locked up in the Discount Houses on the foreign bills which could not be realized. The same cause affected foreign trade in another way, because, owing to the breakdown of the Accepting House system, no new foreign bills could be negotiated, and foreign trade was for a time almost impossible. The result of all these adverse conditions was very soon shown in the published statistics which reflect the condition of trade. Unemployment statistics rose very fast in practically all but war trades, and the Board of Trade figures of exports and imports began to fall off ominously.

To meet these difficulties the government very quickly devised a number of expedients which at least reflected credit upon the originators for their boldness and promptitude. The key-note of the whole was State intervention; and in one thing after another the State shouldered responsiblities which had become too great for private enterprise. The first of these to be announced was the undertaking of marine insurance against war risks by the State. The government undertook to cover any venture to the extent of eighty per cent. of its value, at rates which though high enough—they began at five guineas per cent.—were eagerly accepted by shipowners. These rates must have proved very profitable to the government too in the long run, for the losses at first were exceedingly small; and the government were able to lower the rates gradually, though they had to be raised again in 1917 owing to the submarine menace.

The next problem was how to relieve the Money Market and the banking system of the country from the incubus of the foreign bills. Again the government came to the rescue with the heroic proposal that they, through the Bank of England, would take over the whole of these acceptances from the Discount Houses without recourse; that is to say, that they would take the risk of these bills being ultimately paid by the principal debtors, who were in most cases the Accepting Houses. This the government did by authorizing the Bank of England to rediscount the bills at a rate of two per cent. above the Bank Rate, which immediately after the first rush of the crisis was over had been reduced again to 5 per cent. Of the 7 per cent. the government were to take 2½ per cent. as their insurance premium for bearing the risk, while the Bank received the remaining 4½ per cent. as interest, which, considering that they had the government's indemnity against loss, was quite sufficient. It was estimated at the time that the responsibility which the government were thus shouldering might run to as much as £350,000,000, and as a matter of fact it is now known that bills to the value of more than a third of that sum were actually brought to the Bank; but the final result of the transaction was to justify the government's action, for it is estimated that the great majority of the bills were duly met at maturity. In this the government gave some further assistance by lending funds to the acceptors who could not recover from the ultimate debtors in enemy countries owing to the War.

By this measure the government at once set free a large amount of the funds locked up, and these enabled the Discount Market and the banks to resume business. Thus, the worst of the difficulties were tided over, and business of some sort became possible again, though it was very far from justifying the popular cry of 'Business as usual'. The moratorium was nominally continued till October 4, but few of the banks and not many business men ever took advantage of it.

Other measures were quickly elaborated to deal with different sections of the business world. Thus the Stock Exchanges were finally reopened, under strict government control at first, however, in the way of minimum prices fixed by the government, and with government assistance to the stock brokers who found themselves saddled with heavy unpaid liabilities from Continental debtors. At the same time the government introduced a new control over the exploitation of the capital resources of the country in war time, by prohibiting the flotation of any new company or loan without the approval of the Treasury. Similar measures to those required in the case of the Stock Exchange were gradually extended to other produce markets, such as the Cotton Exchange in Liverpool, brokers being offered financial assistance by the government to enable them to meet their obligations. But the extent to which all these facilities were made use of by the various sections concerned was surprisingly small.

One of the difficulties which had to be faced at an early stage was the collapse of the American Exchanges, which are so closely related to the cotton and wheat industries. An ingenious expedient was adopted to meet the difficulty of getting gold from America to London, by transferring it to Ottawa in Canada, where, being in British territory, it was by a legal fiction accepted as being lodged in the Bank of England, thus enabling its original owners in America to draw on London against it. A similar arrangement was subsequently made for Australia and South Africa.

It remains to consider the further effects of the War in its progress upon the world's financial system; and in order to do that it is necessary to go on to another aspect of the question which, as already explained, lies at the root of the whole matter of the foreign exchanges: namely the balance of trade.

For the foreign exchanges are only the means of adjusting a small excess of trade one way or the other, and so maintaining the normal balance of each country's trade. But the War completely upset that balance, not only in the case of all the belligerent countries, but also of practically every neutral country in the world. The financial problems of the War are bound up with that question, and the balance of trade must therefore be examined in further detail before returning to deal fully with these secondary effects of the War.

CHAPTER XI

THE BALANCE OF TRADE

Effect of the War upon the world's trade and the balance of British trade. Value and volume statistics.—War materials.—New orientation of our foreign trade.—Changing debtors and creditors. Invisible exports and imports.—Effect on the foreign exchanges.—Pegging.

THE general theory of international trade and of the balance of trade, including invisible exports and imports, is dealt with in Chapter XVI of the *Science of Prices*. Here, however, it is necessary to consider more fully the effect of the War upon world trade in general and the British balance of trade in particular, especially as these affected the rates of exchange and international financial relations.

It has been seen in Chapter X (B) that the first effect of the War was to dislocate our foreign trade very seriously for the time being, but gradually, as the emergency measures came into force, things began to readjust themselves, and business was resumed under difficulties. Shipping began to move again as the risk of capture was seen to be comparatively small, and the first sign of the recovery of trade was the free movement of the great crops of raw materials such as wheat and cotton from America to this country; which incidentally soon served to remedy the confusion into which the American exchanges had fallen at first, and to enable America to pay its debts to this country. Gradually most of our industries resumed something like their normal appearance; some more quickly than others because any shortage of normal demand for their products was more than made up by the increasing pressure of demand for war goods of all kinds. Thus the woollen industry had been very busy from the first in turning out uniforms of all kinds in enormous quantities. The boot and shoe and other leather trades were in the same position, and soon another enormous new industry began to develop in the wholesale conversion of all kinds of engineering works to the production of the fabulous quantities of munitions which were to be the chief characteristic of this war. The effect of all these tendencies may be traced, with certain qualifications next to be noticed, in the Annual Returns of Imports and Exports in Table XV. The general effect of these may be briefly stated here as follows: At first all categories of our trade, both imports and exports, and of every class of goods, showed very serious reductions, but within a very few months a new tendency began to show itself. Our imports, especially of food supplies and certain raw materials, stopped falling, and soon began to show actual increases upon the pre-war figures. Exports were much slower but in course of time they also began to improve, and for a time in 1916, they were also above pre-war figures.

In studying these figures, however, several points require to be kept in view to avoid deceptive conclusions. In the first place the figures available are only value statistics, because it is impossible to give figures which would show the volume of trade as a whole; that can only be done accurately for individual commodities. The effect of this may, however, be indicated. The rise of prices of most staple commodities meant that the enormous value figures to which our imports attained during the War must be so heavily discounted that as a matter of fact the total volume of our import trade in 1918 was actually much less than it was before the War. Our exports, on the other hand, which only for a few months showed value figures comparable with the pre-war levels, must have been very far below the corresponding quantities before the War. Table XVI contains some very interesting statistics, largely estimates of course, based upon shipping figures, which fully confirm these tendencies.

This again, however, is only half the truth. The figures of exports and imports do not represent anything like the whole of the commodities which were coming into or going out of the country during the War, because they excluded at least a large part of those imports and exports which were government property, and which then formed so large a proportion of our foreign trade.

Again, to make the figures even as complete as they could be, another item must be taken into account, namely the movements of bullion. It must be recalled that during the War much of the gold which really belonged to England was never actually brought into the country at all, but was lying at the credit of the Bank of England in Ottawa, Capetown, and Sydney.

Taking all these reservations into account, the figures indicate that our foreign trade underwent an entirely new orientation, just as the main object and character of our home industries had undergone a complete change. It is certain that our home production of wealth, including munitions of all kinds, increased very materially during the War. That is obvious from the fact that there was hardly a man, woman, or machine idle in the country, that unemployment in the old sense of the word disappeared, that many people, especially women, were working who never worked before, and that most people were working overtime. In the same way probably our total foreign trade had also increased very largely if war materials are included. But its direction was changed. Just as in our home trade a large proportion of our productive capacity was being diverted to the production of war materials, so our foreign trade was completely turned into new channels. We were importing largely from countries to which we used to export, and *vice versa.* To take one case as an example, our trade relations with America were completely changed. The enormous quantity of munitions and raw materials which we were taking from her was no longer balanced by the large quantities of our own manufactured goods which we used to send to her. We were running into debt to America very seriously, or rather America was rapidly repaying to us the old debts which we had accumulated against her for many years, in the form of money and goods lent for the development of the country. We could not for the time being pay her in goods as we went along, and by one of the paradoxes of the War we could no longer pay her for this excess in gold, not merely because we had not enough gold to do it, but because she did not want so much gold. We were paying America by selling back to her the securities of all kinds which our people held in American concerns: hence the Treasury scheme for the mobilization of American securities in this country with a view to their being sold in America or used as securities for loans raised there to pay for our supplies. The same principle was applied to other countries, and the total amount involved was more than £600,000,000.[1] To this fell to be added our share of the loans by America to the Allies after she came into the War.

But while we were thus in a sense running into debt, or at least living on our capital, in our relations with these countries, we were on the other side running up new claims against most of our Allies and the Dominions, the total amount of which as at April 26, 1919, was £1,739,000,000. When the War was over our balance of trade was probably not much worse than it was before, but we had very largely changed our debtors.

The position of other neutrals as the result of the War was similar to that of America. As to the effect upon our Allies, the result of this movement was of course to leave them largely in debt to us, and to other neutral countries for these war supplies. We shall see in a later chapter what happened to all these War debts when peace came.

Again, it is interesting to note the effect of the War upon our invisible exports and imports. The amount of these was always largely guesswork, and more so during the War than ever, but some indications may be obtained from various facts. In the first place as to freight: a very large proportion of our mercantile marine was commandeered for transport purposes, and its services were therefore no longer an invisible export, except in

[1] *Report of the American Dollar Securities Committee* (212), 1919.

so far as they were carrying war materials, &c., to our Allies. But for the remainder, though the quantity of tonnage was seriously reduced by submarine losses,[1] the freights earned were very much above pre-war levels, if we may judge from the high dividends paid by shipping companies of all kinds. As for the other usual items, tourists' expenses may be treated as non-existent during the War, but they swelled very rapidly again as soon as it was over, and the battle-fields of Europe became the happy hunting-ground of the American tourist.

Reference has already been made to the extra cost of insurance of all kinds, especially war risks both on land and sea, and as before a very large part of that business was done in London. Our banking and other commissions too were probably not materially reduced on the whole, though a great deal of business must have gone to America. But what we lost in one way we probably more than made up for by our share of the business which formerly went to Germany and Austria. Much of their trade came into our hands, and the profits followed the trade.

The only item that was seriously affected was probably, as has been seen, the lending of new capital to the world. We certainly had to restrict our new loans to foreign countries almost to vanishing point, and that not only had a serious effect on our balance of trade during the War, but had a permanent effect on our balance afterwards; but it must be remembered that these two effects are counteracting. If we were not lending so much new capital in the meantime, we were not requiring to export so much against the new loans, so that that alone would set off some reduction in the normal quantity of our exports.

Finally, it follows that all this interference with the normal pre-war course of our trade and the settling down of our trade into new channels affected the foreign exchanges very materially. The American exchanges soon recovered from the pre-war crisis, and rapidly turned the other way against us, as the current of exports began to flow, and that was typical of the position of all the exchanges during the War. All our exchanges with neutrals were against us, because we were receiving more goods from them than we could export to them at the time. On the other hand, all the exchanges between us and our Allies were heavily in our favour, because they were receiving far more from us than they could send us.

---

[1] See Table XVI for Import Tonnage.

From 1916 onwards, however, many of the foreign exchanges with our Allies or with neutrals were 'pegged' by the method first adopted with the American exchange, i.e. by collecting American securities from residents in this country (in exchange for our own war stock) and sending these to America where they were sold, the proceeds being used to buy up all London bills of exchange offered on the other side at a fixed rate ($4.76\frac{7}{16}$).

In pre-war days there were two lists of foreign exchange rates published regularly. The London Course of Exchange (Table XIV) was made up twice a week on Tuesdays and Thursdays; it contained the rates of exchange current in London at the bi-weekly meeting of the bill brokers in the Royal Exchange. There was also a daily list of the rates current in foreign countries on London. During the War, however, and afterwards, so much of the foreign exchange business in London was carried on from the brokers' own offices by cable and telephone every day and all day, that gradually the bi-weekly meetings on change became of less importance, and finally, early in 1921 they were dropped altogether. The last official publication of the London Course of Exchange was on January 20, 1921. Thereafter the two tables of London and foreign rates became merged into one.

CHAPTER XII

THE TEST OF THE QUANTITY THEORY

A. BEFORE THE WAR

Was it true before the War ?—The facts of the gold supply and prices.—How did it work ?—Money of all kinds and credit.—The gold control of credit.

It is time now to return to the question stated at the end of Chapter III, viz.: Is the Quantity Theory of Money true ? Does the general level of prices depend on the amount of money in circulation, and particularly does it depend on the total gold supply or on the amount of gold in use as money ? It will be useful first to review the apparent facts of the position, and see whether they bear out the theory sufficiently to make out a *prima facie* case. The main facts will be found in Tables I and III, which give the world's gold and silver production since 1493; and the Index Numbers since 1782. If these two sets of figures are plotted on a diagram it will be seen that there does seem to be a considerable degree of correlation or causal connection between the two in modern times. Thus, there was a marked rise of prices in the early 'fifties, when the increased gold supply from California and Australia began to make itself felt in the world. The fall of prices from 1873 to 1896 has already been explained as due in large measure to the fact that the joint supply of gold and silver money, which had before then been available as legal tender throughout the world, was suddenly reduced by the demonetization of silver. The world's demand for standard coinage was thus thrown upon gold alone, and the gold supply being insufficient to meet the whole demand for money, especially as those demands were so largely increased by the enormous expansion of trade and industry of all kinds and in every part of the world which marked that period, the money supply became quite insufficient for the increased amount of money's work to be done.

The turn of the tide in 1896 and the marked rise of prices from then till the first half of 1913 coincided with the increased gold supply from South Africa, the Klondike, &c. The short-lived fall of prices in 1901–3 again coincided with the temporary cessation of the South African gold supply during the Boer War. Finally it may be asked whether the downward tendency of prices shown by the Index Numbers from about January 1913 was not the result of the check on the increased output of gold which began in 1910. Was this the beginning of another downward swing of prices to prove again the substantial truth of the Quantity Theory as it was before the War?

These facts, then, are sufficient to show at least a remarkable coincidence between the world's gold production and the general level of prices, which would probably be regarded as convincing were it not for the difficulty of accepting the supposed supremacy of gold, in face of the fact that gold itself, and indeed currency of any kind, plays such a small part in the volume of the world's monetary transactions. Of all the money's work of this country, for example, the enormous proportion which was done even before the War without any gold at all, that is to say the amount of payments made by cheque, &c., where no money passes, has been shown by the figures of the annual turnover of the Clearing House—£16,000,000,000 worth of money's work done in 1913 without the passing of a single sovereign, and the whole supply of gold coinage in the country did not reach one hundredth part of that total. Even if we add the pre-war amount of our token money and bank-note issues to this money total, the aggregate was still very small in comparison with the amount of 'money' of another kind represented by cheques drawn on the deposits in the banks of the country which then amounted to over £1,100,000,000.

The answer to this objection, however, lies in the preceding chapters on the Money Market and the nature of a financial crisis. The London Money Market, which was in a very real sense the centre of the world's financial system, was in its turn centred in the Bank of England, whose whole system was centred in the control and management of the Reserve. The Reserve was the financial barometer of the London Money Market, and through the movement of the Bank Rate its rising and falling controlled the value of money not merely in London but also in all the other money markets of the world, and in this way it controlled the movements of gold throughout the world. The eyes of the financial world were therefore always centred upon the Bank of England Reserve. Now that Reserve consisted of gold; and although the total amount of it was so small, yet its importance was infinitely more than proportionate because it was the only free gold supply in the world, and as a matter of fact the great bulk of the world's gold supplies passed through London. This small central reservoir of gold was the controlling factor in the world's gold supply, and therefore in the world's supply of credit, which in every country was based more or less directly on some form of gold reserve. This gold reserve was, as it were, the bottle-neck through which the whole volume of credit must pass. It may therefore be laid down that as far as the normal conditions of the financial world before the War were concerned, the Quantity Theory of Money had been proved substantially true in terms of gold.

But while the essential truth of the theory may be taken as established, it would be a mistake to imagine that it can be applied in any definite or precise way to any particular set of circumstances so as to enable us to dogmatize quantitatively as to the results of any particular change in the gold supply, for example, what the effect of a particular rate of increase of the gold supply would be upon prices. For in the first place it is impossible to be accurate as to the world's effective supply of gold, because the first question is how far the working of the theory depends on the amount of gold bullion produced or the amount turned into coinage. As a matter of fact, the Reserve contains both gold bullion and gold coins of all kinds, and it is not to be taken for granted either that it is only the proportion of the world's annual crop of gold which is turned into coinage that matters, or on the other hand that the whole gold supply counts, irrespective of how much of it is used for purposes other than coinage. Second, as the world's supply of gold is a stock, not a crop, it is difficult to estimate the effect of a change in the annual supply upon the total amount of gold in use in the world as currency or Bank Reserves.

Again, it is difficult to say how far the amount of token money in circulation might modify the effective amount of gold in the country. If, for example, the people of the country took it into their heads for a time to use silver more largely than they had done for money payments, it would release a certain quantity of gold for other purposes. The same applies to the use of notes. A marked increase in the use of small notes instead of gold would have the same effect as an increase of the supply of gold.

Further, it is impossible to be accurate as to the extent of the superstructure of credit which is at any particular moment standing upon the foundation of gold. The only figures we can take are the amount of the bank deposits and the Clearing House turnover, but these give only an approximate quantitative index of the state of credit.

Finally, it is impossible to measure with any approach to accuracy the extent of the demand for money, that is to say, the amount of money's work to be done in the country at any particular time. It depends not merely upon the amount of goods of all kinds produced and services rendered in the country, but also upon the number of exchanges which must be made of these goods in the course of their passage from the producer to the ultimate consumer, and both of these are almost impossible of measurement.

To attempt, therefore, as has been done by certain writers, to state the Quantity Theory of Money in the form of a definite equation, and then to fill in actual statistical measurements for the various factors of the equation, seems to be straining the theory beyond its capacity for practical application. It can never give more than an approximation to the probable effect of a certain increase of the gold supply upon prices. Like all economic laws, it is only a statement of a tendency, and almost incapable of quantitative measurement.

B. DURING THE WAR

The rise of prices.—Various theories.—Paper money.—Credit inflation.—Pyramiding of deposits.—Ways and Means Advances.—The real meaning of war inflation.

It must next be asked whether the experience of the War had any effect upon the theory either in the direction of confirming it or otherwise. Certainly the facts are sufficiently striking, and at first sight they seem incapable of any explanation which would be consistent with the theory. As will be seen from Table VI, from 1914 to 1918 the general level of prices rose beyond all experience in modern times, while the gold output was actually less than it was before the War. So extraordinary was the rise during the War that the index number in 1918 was higher than it had ever been since 1782, even during the Napoleonic Wars (see Table V).

Further, as will be described in Section C, after the War there came in 1919–20 a still greater rise of prices which completely eclipsed the experience of the War years, and was followed by an equally dramatic fall of prices, all without any material change in the gold supply. Obviously therefore there must have been other causes at work during these periods, but as the conditions prevailing during the War were so radically different from those of the early years of peace it is desirable to treat them separately, and this section will be confined to the War period.

It is of course obvious that there is no need to go to any theory of money supply for an explanation of the greater part of the rise during the War. Direct causes are staring one in the face, such as the increased cost of all raw materials, due partly to the high rates of freight which became universal owing to the scarcity of tonnage, and this extended not merely to freight by sea, but also to the cost of carriage by land. Again, owing to the risk of submarines, the cost of marine insurance was very substantially increased, while the risk of air raids in certain districts must have done something in the same way for fire insurance on land. But the chief item of increased cost in most cases was the labour cost. Wages of all kinds rose materially, which, of course, affected the prices of the goods in which labour forms a large proportion of the cost of production. Again, interest on capital was steadily rising, owing to the enormous demand for capital for War Loan purposes, and this was reflected in the higher rate of interest which all kinds of industrial concerns had to pay for any new capital raised, while the financing facilities granted by the banks to business of all kinds inevitably rose in cost in the same way. This increased cost of capital had its effect on the cost of all machinery, which had also to bear heavier interest charges than formerly. Further, there is very little doubt that in many cases the price of particular articles rose abnormally simply because the supply was short, and the fortunate producer or dealer who happened to possess a good stock could charge whatever price he liked, or at least the highest price he thought his customers would pay. And though these cases were probably less common than was popularly believed, yet it is certain that they contributed in no small degree to the aggregate rise.

Passing from these comparatively obvious causes of the rise of prices, there were many theories afloat as to other causes, all of which come within the scope of the quantity theory. In particular, it was freely alleged that the rise was due (*a*) to the increased issue of paper money, and (*b*) to an excessive inflation of credit by government financing of the War.

The first of these theories may be comparatively easily disposed of. In the first place, Table VII shows that the total issue of Currency Notes was barely £300,000,000 up till the end of 1918, and against this must be set the pre-war gold currency of the country (£123,000,000). To some extent also the Currency Notes took the place of silver currency in circulation. It must be remembered, too, that quite a considerable number of the Treasury notes went abroad; apart from their use in the War areas they were found in every port from Gibraltar eastwards, and probably wherever else the sovereign used to circulate; and they were actually surcharged and used as local currency in Egypt for a time, during a severe scarcity of the local coinage.

But even the total amount would probably not have been enough under war conditions to produce any excess, for two reasons. In the first place, the circumstances of the War were in every way abnormal; and it is probable that one effect of the changes was to make people use currency in one form or another a great deal more than they did formerly. For example, the needs of the army involved the circulation of a very large amount of actual currency in the country. Again, wages were higher, separation allowances were being paid to soldiers' and sailors' dependants to the extent of £80,000,000 per annum, it was said; there was far more money being earned and spent by the working classes, many of whom found themselves with more money in their hands than they had ever known before. But the working classes do not keep banking accounts; their monetary transactions are all done in hard cash, and in this way a much larger amount of currency was required in the country than was formerly the case. Finally, it seems hard to believe that there could have been any marked rise of prices due to the excessive issue of paper money (which is equivalent to the depreciation of the paper money) without there having been some disposition on the part of the public to prefer gold to paper, and any signs of such a tendency were entirely wanting, either at home or abroad. The paper money maintained its value absolutely, and that is not to be wondered at in view of the essential fact that the Treasury notes were in the last resort convertible into gold at the Bank of England,[1] though sensible and patriotic people never showed the least desire to convert them, but gave up the gold habit completely.

The idea that the rise in prices was directly due to excessive issues of paper money may therefore be regarded as at least 'not proven'. It is not so easy, however, to deal with the other theory that the rise was largely due to the inflation of credit by methods which were in some way connected with government finance. Here again the facts tend to give some support to the argument, for, as will be seen from Table X, the total amount of deposits in the British banks increased from £1,104,000,000 in 1913 to £2,161,000,000 in 1918. This of itself does not necessarily prove an increase of credit facilities which would amount to inflation, but there are several ways in which it is said that such an inflation may have taken place.

One of these theories was connected with the system which was described as the pyramiding of deposits by the banks. It will be remembered that the chief business of bankers is to receive money from one class of customers on deposit and to lend it out to others as discounts or loans and advances. Now when a bank makes an advance to a customer, the form of the transaction is not that the bank hands over to the customer a bag of gold for the amount of the advance, but that the bank places a sum to the credit of the customer against which he can draw, and this has the same effect as the lodging of a deposit by that customer. When he proceeds to draw cheques on this account these are paid in by the receivers to their bank accounts and create new deposits there. These other banks having now increased deposits must proceed to employ the funds, which they do by making advances to their borrowing customers, who again repeat the process, and so the total amount of deposits goes on increasing apparently *ad infinitum*. But many of those who put forward this theory forgot one essential factor in the system, namely, that the banks must keep a certain proportion of all their deposits in cash or at the Bank of England. For the sake of argument this percentage may be taken as normally about 10 per cent. Thus if the banker receives a new deposit of £100,000 he can only lend at the outside £90,000 in new advances, retaining the balance in cash, and so on. The result is that the utmost limit of this system of pyramiding deposits is about ten times the amount of cash which the banker has available.

---

[1] Cf. p. 165.

Finally, an increase of the total pyramid of credit can only take place if there is an increase of the total amount of cash, i.e. if 'new money' as it might be called becomes available.

From what sources then could such new money come? The most obvious of course is the import of gold, but during the War that was less than normal. It was argued, however, that there is another form of cash which to the banker is as good as gold, namely cash at the Bank of England, and the argument was that during the War the working of the process of government loans created a largely increased amount of cash at the Bank of England at the credit of the banks which enabled them to enlarge the pyramid of credit, and this argument is the crux of the whole problem.

The root of the matter is that war creates an enormous demand by the state for goods and services of all kinds, and these must be paid for in some way. State services in times of peace are provided for by the state taking from the resources of the individual, mainly in the form of taxation, a certain portion of his purchasing power and using it for the state's own purposes; but this does not involve any increase of purchasing power, because what the state gains the individual loses. But the abnormal scale of war expenditure always makes it difficult for the state to finance its war budgets in this way. The burden is so heavy that it is not possible to meet it all by immediate taxation (even if it were fair to throw the whole burden upon one generation), and it has always been recognized as inevitable that a large part of the cost of war must be met by borrowing rather than by taxation. Even then, however, it should be possible to arrange borrowing in such a way that the purchasing power which is transferred by a loan to the state would be taken out of the pockets of the lenders, whose own purchasing power would thus be correspondingly reduced. If this could be done there need be no inflation.

Owing, however, to the unprecedented scale of the Great War, it was obvious from the first that the proportion between taxation and loans was bound to be very different from previous cases. Indeed, so enormous was the scale of expenditure that at first it appeared almost impossible to raise the amount at all by any ordinary methods of borrowing. At the same time the state of affairs in the banking world during the early months of the War provided the opportunity of adopting other measures. When the first strain of the crisis was over it became evident that the normal civilian business of the country had been seriously checked, with the result that the amount of their deposits which the banks were able to employ in their ordinary business of discounts, &c., was far below the usual proportion. When, therefore, early in 1915 the first great government loan of £350,000,000 was floated, it seemed natural and quite unobjectionable that the banks should utilize part of their surplus assets in taking up the loan themselves pretty heavily. It has even been said that they were officially desired to do so.

But this method of financing the War had effects which were not realized at the time. When the government takes money from the individual, either by taxation or as a loan, the amount is in effect transferred from his deposit with a bank to the credit of the government at the Bank of England. They then draw cheques in favour of their suppliers, who in course of time pay these in to their credit with their own banks. Thus the circle is complete, and the total amount of the Other Banks' deposits is not increased. But if the government borrows direct from the banks instead of from the public, the government account at the Bank of England is increased and there is no corresponding reduction of private deposits with the Other Banks. If then the government proceeds to pay out this money as before to its creditors by cheques on the Bank of England, these come back to the banks as deposits and are paid in by them to the Bank of England, thus increasing the amount of the Other Banks' balances at the Bank of England which is the equivalent of cash, and this enables them to increase their advances to their customers to the extent of ten times the increase of their cash. Of course, if any of the banks drew out currency from the Bank of England against their balance this would correspondingly reduce their power to multiply that cash balance in the form of advances and ultimately deposits. There is, however, one obvious flaw in this argument. How did the Other Banks make the loan to the government without reducing their cash at the Bank of England to the full extent of their loan ? They might have done it by selling other investments, but in that case the purchasers of these securities would have reduced their deposits.

The question remains, however, how such a series of transactions would affect the government accounts at the Bank of England and the position of the Bank itself. A new loan means an increase of the public deposits at the Bank of England without a corresponding reduction of the other deposits, for the assumption of the whole argument was that the banks made the loan to the government without drawing to the full extent on their cash at the Bank of England. The result would be an increase of the total deposits at the Bank of England without any increase of the Reserve, which would mean a reduction of the 'Proportion', i.e. the percentage which the Reserve bears to the total deposits. If any of the cheques issued by the government against these deposits were drawn by the receivers in currency this would mean an actual reduction of the Reserve, and in fact the only way by which such cash drawings could be made would be by the creation of further currency notes. Now after the first year of the War there was a steadily increasing demand for currency notes, because the increased production of goods, especially munitions, meant an enormous increase of the nation's wages bill which is mostly paid in currency. Week after week the banks in the large industrial towns were requiring more currency notes, many of which remained in circulation instead of coming back to the banks a few days after they were paid out. The method by which the government were able to go on issuing these notes is important. They did not resort to the easy way of simply printing notes and issuing them direct to their creditors in payment of services of all kinds. What they did was in effect to borrow money as required from the Bank of England, or in various forms from the public, and pay their debts like any one else by cheques on the Bank of England. In so far as payment of these cheques was required in currency notes the Bank had to get currency notes from the Treasury, who issued them to the Bank against securities, these securities being mostly government bonds. Thus by a roundabout process the government secured pretty much the same result. They paid for munitions, &c., out of the proceeds of loans, and the Treasury supplied the necessary currency notes also against government loans.

But what was the effect of the currency notes on the position of the Bank of England? Their deposits, both Public and Private, were piling up, but without any increase of their cash, i.e. the Reserve, so that the Proportion came steadily down; but nobody worried about it, because, in the first place, they knew the government would have to protect the Bank, and, in the second place, the reduction of the Reserve did not foreshadow the usual possibility of being unable to get gold or bank-notes, which was the great danger in a pre-war crisis. That could not happen now because the government could always issue more currency notes to meet any demand for cash.

It is impossible within the limits of a text-book to go into any detailed examination of the facts and to follow out the working of the system above described throughout the War period. The necessary statistics of the Clearing Banks are, however, given in Table XIII, and the writer must confine himself to stating his tentative conclusion that the true test or index of credit inflation during the War is to be found, not in the increase of the deposits of the Other Banks, but in the reduction of the Bank of England's Proportion, and Table XII shows how very far that reduction was carried. It is also interesting to note that the particular method of government borrowing from the banks was dropped quite early in the War, and that from 1917 onwards the bulk of the financing of the War was done by borrowing from the public, either on short terms, such as treasury bills, war bonds, or war savings certificates, or by permanent war loans. Yet the inflation continued throughout the War, and long after the particular methods to which the blame was first attached had been abandoned.

Another favourite scapegoat of the critics of the government's financial methods was what are known as the 'Ways and Means Advances'. These were confined in pre-war days to temporary advances by the Bank of England to the government to tide them over periods when expenditure had to be met before the revenue to cover it had been received. Throughout the War, however, these advances became chronic and of enormous amounts, and it was argued that this was the most obnoxious form that government borrowings could take, because every payment of this sort went to increase some bank's balance at the Bank of England and so form the basis for a further creation of credit. But after the War was over the government for the first time began to publish statistics of the Ways and Means Advances, differentiating between those which really meant actual advances by the Bank of England to the government, and others which merely meant that one department of the government was borrowing a balance lying with the Bank of England at the credit of another government department. Unfortunately the differentiation of the statistics was not carried back through the War years, so that it is impossible to estimate the extent of the true Ways and Means Advances during the War, and, therefore, to prove how far they were the main cause of credit inflation.

It is, then, impossible to say to what extent the actual increase of bank deposits was in excess of the requirements of the country, for here again it must be remembered that the other side of the account is almost incapable of statistical measurement, viz. the total volume of the country's industry and production during the War. Before the War it used to be estimated that the national income of Great Britain was not less than £2,250,000,000 per annum. Owing to the War many of our industries suffered a material reduction in their turnover, but against this must be set the output of the greatest of all our industries during the War—the making of munitions. The output of that industry will never be known, but it was certainly enormous, and it is more than likely that if the total were added to the output of all our other industries, it would be found that the aggregate national income during the War was increased probably to at least £3,000,000,000, even at pre-war prices. When the rise of prices is taken into account the total value would probably exceed £5,000,000,000. In view of such an increase of money's work to be done, there must have been a much larger need for credit and financial facilities of all kinds; and it is by no means certain that the increase of the deposits represents anything more than what would be required for this purpose. It is, of course, obvious that this is partly an argument in a circle, but it may be none the less true. Whatever started the rise of prices, one result would inevitably be an increased need for credit to finance them, and currency to pay for them.

It is therefore impossible to tell how far the rise of prices during the War was due to what may be called natural causes, and how far to inflation or monetary causes. There seems to be no doubt that it was partly due to the latter, but it is not possible to tell how far. But, after all, to say that the rise of prices was even partly due to inflation is merely putting in another form what is obviously the true cause of the rise of prices during any war. That can be much more clearly explained by the use of Marshall's idea of the National Dividend, by which he figuratively expressed the fact that the total amount of goods produced in the world constitutes, not only the supply of all kinds of goods for consumption, but also the demand for these same goods, for production is at once the sole source of the right to consume and also the measure of that right—and it must be remembered that 'goods' include services. Now during the War the country was producing goods or services of one kind or another, to an extent absolutely unprecedented in history. Every one was busy either in war service abroad or in the production of war goods or services at home, and all these services had to be paid for.

In normal times when a man receives his wages for his week's production the first thing he does is to go out and spend most of it on the products of other people. During the War the producers were earning more than they had ever earned in history, and naturally they expected to spend the money. But when they went out to do so they found the shops very bare of goods, and (even apart from the rationing of most necessaries) they could hardly find anything to spend their money on. Naturally they bought anything they could get, and were not very careful as to how much they paid for it. The meaning of this extraordinary state of affairs was not at first realized. The world had produced goods and services to a volume entirely unprecedented. The government had to pay for all these goods and services, and had to find the money, in other words, to create the purchasing power with which to do so. But when all these wage-earners went to spend their money the goods were not there, for the obvious reason that a large proportion of the goods and services produced had been destroyed. The result was that the purchasing power in existence was represented by the quantity of goods and services produced, but the civilian goods, upon which alone this purchasing power could be spent, represented only, say, half of the goods produced. It was as if Marshall's ring of producers sitting round the great heap which represented the National Dividend, the product of their labours, found, when at the close of the period they went forward to take the equivalent of their share out of the heap, that half of the heap had sunk through a hole in the ground and disappeared. The result would be that each of them would receive in exchange for the money equivalent of his production only half as much as he had produced.

Is all this, which is the inevitable result of the destructiveness of war, to be labelled as merely the result of inflation? It is, of course, inflation in a sense, because the government had to create the purchasing power to pay for the products they required; but inflation ought to mean the creation of purchasing power in excess of what is necessary to do the money's work of the country. The government did not create any more purchasing power than was necessary to pay for the goods and services produced; but owing to the abnormal lack of equivalence between the goods produced and the goods available for consumption, the amount of purchasing power necessary to pay for the production of the goods was far in excess of the value of the goods available for consumption, and the inevitable result was a rise of prices. The fact is that such a rise of prices is inseparable from war; and to argue whether that rise was due to inflation, and whether inflation took the form of excessive paper money or excessive credit, is really beside the question. The rise of prices was due to the War, and no system of currency or credit could have prevented it. If it were conceivable that the Bank of England had possessed a secret and inexhaustible gold mine in the courtyard of their premises, and had been able to produce sovereigns for the government to the full extent of their requirements, the resultant rise of prices would have been practically the same.

The question in the meantime, however, is whether the War experience in any way altered our views as to the Quantity Theory of Money, and the answer seems clear. The War proved the theory up to the hilt, if 'money' be taken, as it must be, in the widest sense of all, including credit. It is obvious that the increased quantity of 'money' during the War was not gold, and it is doubtful whether even the comparatively large quantity of currency notes put into circulation was (except indirectly) the cause of the rise of prices; it is just as likely to have been the result. The real culprit was the credit system.

The Quantity Theory of Money, therefore, stood not merely unshaken by the War, but more firmly established than ever, with this difference: that 'money' means money of all kinds, including credit. But the question did not end with the close of the War.

C. POST-WAR BOOM AND DEFLATION

Prices after the War.—Armistice slump.—Post-war boom.—Deflation.

Every one expected that as soon as the War was over things would quickly get back to normal, and the first sign of that would be a fall of prices. Such a fall had actually begun in August 1918, though it is probable that this was only seasonal, and that, had the War continued throughout the winter, it would have been followed by a further rise. After the Armistice, however, the fall continued till March 1919 (taking the *Economist* Wholesale Index Numbers); but from April there began a new rise, which lasted for twelve months and carried the general level of prices up to a point far above even the War record.

The effects of this upheaval were, of course, very serious, and discussion as to its causes became keener and more bitter as the rise progressed. Indeed, it was actually during this post-war period that many of the theories of inflation which have already been discussed in the previous section of this chapter were elaborated. On the other hand, the experience of the post-war period threw a good deal of light on the causes of inflation during the War, because after the War the conditions were, of course, completely changed in many respects, and it became possible to draw more definite conclusions as to what had been the causes of inflation during the War.

Following the same line of argument as in Section B, we may take first the theory that the issue of currency notes was the cause of inflation. The history of the movement of prices and the issue of currency and bank-notes after the Armistice is shown in Diagram A, and goes far to confirm the view already put forward that the issue of currency notes was the effect, rather than the cause, of the rise of prices, because the movements of the currency followed, rather than preceded, the movements of prices, both on the rise and in the fall. The actual highest record of the Currency Notes was £368,231,000 on December 22, 1920, or nine months after the highest point of wholesale prices and two months after retail prices had passed the highest point.

Passing on to the theory that the inflation was due to government methods of finance, and particularly to Ways and Means Advances leading to inflation of credit by the Other Banks, it became possible after the War to get much more evidence on this point, and the facts are (1) that the deposits of the Clearing Banks, as shown by the Macmillan Committee, continued to rise till December 1920; actually the highest point of all was in December 1921. (2) The Ways and Means Advances (excluding those from other departments) dwindled almost to nothing in the autumn of 1919, and never rose again to any figure worth considering. (3) The Bank of England's 'Proportion' continued to fall till December 1920, when it was a little below eight per cent.! Comparing these dates with the course of prices during the post-war boom, two important facts emerge: (*a*) that the 'inflation' of the bank deposits and the

reduction of the Bank of England's Proportion continued for a long time *after* the break in prices; (*b*) that the high figures of Ways and Means Advances were passing into history before the final rise of prices had well begun. Neither of these, therefore, seems to show any evidence of having been the *cause* of the post-war rise of prices.

But, before coming to any conclusion as to the causes of the post-war inflation, it is necessary to consider what happened during the subsequent period of deflation. By the close of 1919 every one was crying out against the rise of prices, and the popular slogan was that 'prices must come down'. In the course of less than twelve months every one had forgotten the danger of falling prices, which had been very clearly demonstrated during the few months of the Armistice slump and the extraordinary period of stagnation in many of our industries which it produced. At that time every one was either fearing or hoping for falling prices, with the result that nobody would place orders, and the consequent depression of trade was just about the worst thing that could have happened. What the world most needed at that time was to go ahead at full speed in the production of all the ordinary commodities which had been elbowed aside by military necessities during the War. There were, of course, plenty of difficulties in the way of such a resumption of pre-war production, but the slump in prices discouraged all attempts to overcome these difficulties.

What made the outcry against the new rise of prices so strong was partly the conviction that it was due to preventable causes. Inflation had now become a catchword, and the air was full of theories as to its cause and cure. The origin of many of these theories may, perhaps, be traced to the first report of the Cunliffe Committee on Currency and Foreign Exchanges after the War, published in August 1918,[1] which was the first official expression of the theory of inflation by pyramiding of the bank deposits. When the new rise of prices grew into the boom of 1919–20 the policy of 'Dear Money' as the lever to produce deflation found voice in many quarters, and the first attempt to give effect to it was the raising of the Bank Rate from five to six per cent. on November 12, 1919. This, however, did not seem to have the desired effect, and in February 1920 the demand for a further increase in the Bank Rate became insistent. In the meantime the government finances had been taken in hand, and the great Victory Loan of June 1919 was the beginning of the reduction of the Floating Debt, particularly the Ways and Means Advances from the Bank of England, which fell to quite negligible figures immediately afterwards.

---

[1] *First Interim Report of the Committee on Currency and Foreign Exchanges after the War*, 1918, Cd. 9182.

Looking back now over the events of the deflation period, it almost seems as if the deflationists had been waiting till the Victory Loan was out of the way, but that the time was not considered ripe for taking definite steps until the United States also had put their financial house in order. This they did by issuing a large Consolidating Loan in February 1920, and that seems to have been the signal for the announcement of a similar deflation policy in America. Nothing was actually done in England, however, until April, 1920. On April 14, *The Times* published excerpts from a memorandum by Mr. Basil P. Blackett, of the Treasury, in which he set forth the theory of deflation and dear money, and this is so important that the following paragraph may be quoted:

> 'To effect deflation now that the War is over, the government must find means for persuading the public to hand over some of its present greatly enlarged purchasing power (as expressed in terms of money) to be used by the government in repaying the floating debt (and especially Ways and Means Advances), the great part of which represents the credits created by the government during the War and still unrepaid. By securing control of the purchasing power of the public and using the money to wipe out past creations of

credit, the government (1) reduces the spending power of the public and so tends to check consumption and reduce prices (and also to increase exports); (2) reduces the amount of accommodation the banks can give to customers, and also the amount of accommodation the customers want; (3) as the result of reduced money spending by the people and reduced lending by the banks, less currency is needed, and the government is enabled to reduce the outstanding amount of currency notes.'

It seems a little more than a coincidence that it was on that very day that the government took action. The excuse given was that an issue of Treasury Bills had not been adequately taken up and it became necessary to raise the Treasury Bill Rate to 6½ per cent. This meant that the Bank Rate must also be raised, as it was to 7 per cent. on the following day, and this proved to be the turning-point of the whole position. It is remarkable that the policy which had apparently proved ineffective in November should have been completely successful in April, and one interesting theory is that in the meantime the government had adopted the principle of restricting the issue of currency notes as described on page 163. It is doubtful, however, whether that could have had much effect, because if the banks had at any time been in need of currency in excess of the limit they could have forced the hands of the government by allowing Treasury Bills to run off, thus adding to their cash at the Bank of England, and then drawing on the Bank for currency notes or bank-notes, which the latter could not refuse.

It is now generally admitted that no one in authority, either in financial circles or at the Treasury, anticipated the full extent of the effect of this Dear Money policy. The first results were merely the normal reaction of the financial world to the raising of the Bank Rate. The banks throughout the country at once began to 'strengthen their position' in the usual way, by making borrowing more difficult and endeavouring to call in their loans; but the effect of this procedure was far beyond expectation. This was probably due to the extraordinarily high level to which the boom had been carried, but that was merely the natural result of the abnormal conditions of the time. It must be remembered that for five years the world had been doing without all sorts of ordinary supplies, including food and clothing, while a tremendous amount of reconstruction work was crying out to be done, especially in the devasted regions, as well as the arrears of normal structural work, particularly housing. When the War was over and the blockade withdrawn, it was natural that all the world should rush to make up the deficiency of their supplies of every kind of commodity; and every country that could produce the required goods was inundated with orders far beyond their capacity to supply. The result was the inevitable rise of prices, which meant that everybody was making money, and credit was easy, as it always is under such circumstances. At the same time, however, cautious people in the world of finance were becoming uneasy, in view of the movement of the foreign exchanges, especially against the belligerent countries, who were now at last able to buy goods from abroad, but were not yet able to pay for these goods with their own production; and this was to some extent restraining the eagerness of the manufacturers to sell.

When, therefore, the banks began to issue orders to their customers to reduce their overdrafts, the only way the latter could do so was to stop buying any more goods, and even refuse to take deliveries under existing contracts, in the hope that sales to the public would bring in the necessary cash. But it was here that the vision of the deflationists had failed to foresee one natural effect. Everybody was talking about prices coming down, and the consumers seemed suddenly to jump to the conclusion that, if prices *were* coming down at last, they had better suspend purchases and *wait till they did*. The result was to produce a sudden stalemate—nobody would buy anything.

Retail shops found their trade suddenly at a standstill, and could neither reduce their stocks nor pay for the goods recently ordered, which were still coming in. The effect was to produce the most drastic strangulation of demand that has ever been seen. The consumers would not buy, the retailers could not pay their accounts, the wholesale houses could sell nothing and, of course, could not pay the manufacturers. The effect was to produce in a few weeks the most extraordinary position of frozen credit, which was the very opposite of what the banks wanted. No one could pay anybody anything, and the state of affairs all round rapidly became not only alarming but actually desperate.

The period of stagnation and slow but painful recovery which followed convinced most people that falling prices are after all the worse of the two evils. It is now generally admitted that the process of deflation, inevitably painful, was pushed much too fast and too far, and perhaps also that its application was too long delayed. In the meantime, however, our concern with the question is how far it throws light on the causes of inflation, and the writer's conclusions may be stated, again tentatively, as follows: The causes of the post-war rise of prices were entirely different from those which caused the rise during the War. They were, briefly, that the world had not yet had time to get back to anything like pre-war production of ordinary commodities when the flood of accumulated arrears of demand was let loose upon it. The result was a period of virtually famine scarcity which could only lead to a rise of prices. Increase of credit facilities under such conditions was practically inevitable; the banks could not be expected to display such superhuman wisdom and courage as to refuse credit to customers who were making money hand over fist. It cannot therefore be maintained that the inflation was due to excessive credit facilities granted by the Other Banks, or that the deflation was attributable to any voluntary action by them. The fact is that deflation was a deliberate policy on the part of the government, and that the Other Banks were simply obeying orders in following the lead of the Bank of England.

It seems, therefore, that the Quantity Theory of Money had very little to do with the post-war boom, but the deflation of 1920 was the first case on record of restriction of credit being deliberately applied with the intention of lowering prices, and its success was a warning for the future. So powerful an engine may well cause those who may be tempted to use it in similar circumstances to doubt whether they possess sufficient control of the machine to have any certainty of the result.

CHAPTER XIII

POST-WAR RECONSTRUCTION, 1918–28

Cunliffe Committee.—Currency notes.—Bank-notes.—The gold standard.—Cost of production of gold.—Silver.—Foreign exchanges.—Purchasing Power Parity theory.—Balance of trade and indebtedness.—Reparations and inter-allied debts.—Currency note issue.—The Young Plan and the Bank for International Settlements.

COMING now to the history of post-war financial reconstruction, reference has already been made to the Cunliffe Committee's first report of August 1918, in which they discussed the future of the currency note issue and recommended that, with a view to their gradual reduction during the reconstruction period, the actual maximum of the fiduciary circulation in any year should become the legal maximum for the following year. In their final report, published in December 1919, they reaffirmed this proposal, and the government immediately announced their intention to adopt it. The fiduciary issue, i.e. the amount uncovered by gold or bank-notes, was kept below the maximum by the addition of further bank-notes to the currency note reserve. In April 1921 a sum of three million pounds in silver coin was added to the currency note reserve, and this was gradually increased until it reached seven millions. More than once expectations were aroused that the government would deal with the whole question of the currency note issue, probably incorporating it in some way with the existing Bank of England note issue, but nothing was done till 1928. The reason, probably, was that any such step must be preceded by a decision on the question of the return to the gold standard.[1]

A word must be said as to the history of the Bank of England note issue, especially during the post-war period. From Table VII (*a*) it will be seen that the circulation only increased slowly during the early years of the War, but from 1917 it began to rise more rapidly till, by the end of 1918, it was more than double the pre-war figures. After the War the rise became still more marked, especially in 1920, when the government practically compelled the Other Banks to hand over to the Bank of England the bulk of the gold which they had been holding before and during the War, which was said to amount to about forty million pounds. From August 1919 the government began to add Bank of England notes to the coin and bullion held against the currency note issue, so that in any calculation of the total note currency of the country this amount must be deducted to prevent duplication. In 1925 this amount was increased by returning to the Bank the whole of the gold held in the currency note reserve (but not the silver), replacing it entirely by notes, and it is interesting to show here the effect on the total issues of Bank of England and currency notes as regards the real amount of gold and silver cover held against them in all.

---

[1] See *Report of the Committee on the Currency and Bank of England note issues*, 5 February 1926, Cmd. 2393.

Total Bank of England and Currency Note Issues, as at August 5, 1925.

Bank of England Notes:			
Total Issue	£182,404,875		
Less held in Banking Department	36,085,250		
Circulation		£146,319,625	
Gold held against total issue			£162,654,875
Less Notes in Banking Department			36,085,250
Net Gold Cover			126,569,625
Currency Notes:			
Total Issue	£305,484,000		
Less Bank Notes	56,250,000		
		£249,234,000	
Silver held against Currency Notes			£7,000,000
Total Circulation and Cover		£395,553,625	£133,569,625

The Total Cover was therefore 33·8 per cent. of the Total Circulation.

The chief result of the increased issue of Bank of England notes was the rise of the percentage of gold held against the notes. The 'Authorized Issue' of notes against securities being still fixed under the 1844 Act (though raised to 19¾ million pounds, as already explained), every additional note issued meant so much more gold, so that, with a total issue which amounted on 5 August 1925 to £182,404,875, the gold cover was no less than 89 per cent. This, of course, would have been preposterous were it not for the parallel issue of currency notes which was secured only by bank notes and a little silver. The real position of the two issues should therefore be combined as shown above. From this it appears that the percentage of bullion held against the total net circulation was just about the same as in pre-war days, when the circulation was about thirty million pounds, and the gold cover (excluding that of the notes in the Banking Department) about ten millions or 33 per cent. net cover for the actual circulation.

Every one, from the Cunliffe Committee downwards, was agreed that the resumption of an effective gold standard was the one thing to aim for at the earliest possible moment after the War. But, before discussing the steps which were taken with that end in view, we must be quite clear as to what happened to the gold standard during the War. As a matter of fact, there was never throughout the whole period of the War any technical suspension of gold payments. Bank of England notes continued to be payable in gold as before, and the currency notes were also specifically convertible into gold. As no one seemed to be aware of the fact, and most people refused to believe it, it may be well to quote here the actual words of the Currency and Bank Notes Act, August 6, 1914, Section I (3):

> 'The holder of a currency note shall be entitled to obtain on demand, during office hours at the Bank of England, payment for the note at its face value in *gold* coin which is for the time being legal tender in the United Kingdom.'

The method by which the government secured in effect a complete embargo on the use of gold was very ingenious. The chief use of gold is to export it, and what they did was simply to refuse to include shipments of gold under the government's emergency scheme for war insurance of cargoes. As the risk of loss was substantial, this practically involved the prohibition of export and was completely effective. For the rest the prohibition of the melting down of gold coinage was sufficient in most cases to prevent any attempt to realize the enhanced bullion value of the sovereign, and gold virtually disappeared from circulation.

In the meantime the position with regard to the world's gold supply during the War had provided an illustration of the effect of a rise of prices upon the cost of production, and therefore upon the output of gold. As will be seen from the statistics in Table I, even before the War the world's production of gold had been distinctly checked, but as the War went on and prices rose, the effect upon the gold production became more serious. This reduction was due mainly to the high cost of production both in labour and materials of all kinds, and the shortage of labour and explosives resulting from the War. In 1918 some of the mines had already closed down; in practically all cases the output had been reduced, and it was stated that if conditions did not improve other mines would have to be closed, while the output from low-grade ores would be still further reduced. In September 1918 the question was remitted to a special committee, whose Report[1] definitely negatived the suggestion of a subsidy to assist the producers to maintain their production.

With the coming of the Armistice the question dropped out of sight, but early in 1919 an entirely new situation developed. As the result of the reopening of the world's trade the foreign exchanges began to show the effect of the huge demand for goods, especially by the countries which had been blockaded during the War. Our own rates of exchange had been protected or 'pegged', as already described, which was essential as a war measure, because the government themselves were the greatest purchasers abroad and would have suffered most by the rise of the exchange. But when the War was over the government could not be expected to maintain that system for the benefit of private traders, and in March 1919 the exchanges were 'unpegged'. But the immediate effect would have been an outflow of gold, and to prevent that it became necessary to control the export of gold. This was done by an Order in Council in April 1919, which forbade the export of gold except under licence from the Treasury. Thus it was not actually till after the War was over that there was technically any suspension of the gold standard.

---

[1] *Report of the Committee on the Gold Production of the British Empire,* November 29, 1918.

The system of export licences merely gave the Treasury and the Bank of England control over gold movements which would have been inevitable in any case. The gold-producing countries naturally wanted to send their gold where it would command the best price. If they sent it to England it was only worth £4. 5*s*. per oz. fine. If they sent it to New York its value was $20.67 per oz., and as the New York rate of exchange soon began to move against us the South African producers would simply have been compelled to find some means of shipping the gold direct to New York. Accepting the inevitable, therefore, the Treasury granted licences for re-export from England, so that the gold followed the normal course of trade and merely passed through London. The result was that gold flowed freely to the United States and to such an extent that it soon began to cause considerable embarrassment to the authorities there.

Nothing has been said in previous chapters about the movements of silver prices during the War because, remarkable as these movements were, they were completely eclipsed by what happened after the War. It will be more convenient, therefore, to deal with the whole question here. The disappearance of gold from circulation at the very outset of the War naturally produced an increased demand for silver currency which it was quite impossible to meet, and for a time postal orders had to be used. The appearance of the currency notes soon removed this difficulty, but during the early years of the War practically every country indulged in heavy issues of silver, partly because of the increase of actual currency requirements, but also, no doubt, in certain countries because of hoarding of silver, gold being no longer obtainable for that purpose. The rise of prices, however, and consequent increased cost of production, affected the world's supply of silver even more quickly than that of gold, the deficiency being principally in Mexico, owing to the politically disturbed state of the country, and from about the end of 1915 the price of silver began to rise rapidly. By September 1917 it had reached 55*d.*, which was near enough to the standard price of 62*d.* to make it necessary for the governments chiefly concerned to take action in the matter. The U.S.A., being the largest producers of silver, were the first to do so, and in September 1917 they prohibited the export of silver except under licence. They held enormous stocks of silver dollars coined before 1893 under the Bland and Sherman Acts, and by the Pittman Act of April 23, 1918, they agreed to sell to the Allied Governments up to 350 millions of these dollars at a price of 101½ cents per oz. This was fully taken advantage of, most of the silver going to India, and in this way the price of silver was effectively controlled at about $1 per oz. throughout the War. At the same time France was able to fall back on her stocks of 5-franc pieces coined before 1873, and by these means the situation was saved during the War.

After the War and the unpegging of the American exchange in April 1919 the American control of the price of silver also lapsed in the following month, and, as the supply of silver comes largely from America, its price immediately began to soar with the American exchange, till in February 1920 it touched the record price of 89½*d.* per oz. This, of course, brought to a head the trouble which had been brewing in India throughout the War with regard to their currency and exchange system, which was based on the valuation of the rupee at 1*s.* 4*d.*, equivalent to a silver price of about 42*d.* per oz. From August 1917 the rate of exchange had been gradually raised to 1*s.* 6*d.*, at which it remained till May 1919, when it began to rise again with the removal of control and the rise of silver. In that month the government of India appointed another Committee, whose Report, dated December 22, 1919,[1] is an invaluable compendium of information on the silver position. Their remedy was to raise the rupee to its old value of 2*s.*, but before this could be put into effect the market value had already gone above that figure, and in February 1920 it actually went to 2*s.* 9½*d.*

At the same time the rise in the price of silver was having a serious effect on our own position with regard to silver coinage, and in March 1920 the government, panic-stricken at the cost of maintaining the silver currency, which, even at its pre-war standard of 37/40ths fine, was now worth more than its face value, adopted the extreme measure of cutting the standard to 50 per cent. By the time the Act was passed, however (March 31, 1920), the danger was past. The abnormal price of silver produced its natural remedy. Continental countries began to sell their silver currency and silver plate at its bullion value, with the result, of course, that their silver currency disappeared, but that was easily replaced by the floods of paper money which were already beginning to pour from the printing presses. At the same time the world's silver output, especially from Mexico, began to recover as the result of the high price, while silver using countries, such as China, reduced their consumption, with the result that by June 1920 the price had fallen to 44*d*. and the repurchase clause of the Pittman Act in America came into force. It appeared, however, that this clause only applied to 'domestic' silver, so that since then there has been the curious phenomenon of two silver prices in the United States.

---

[1] *Report of the Committee on Indian Exchange and Currency*, Cmd. 527.

By the end of 1920 the reaction of the deflation slump in Europe was having its effect on the trade position in India. Her favourable balance of trade, due to the enormous prices of her chief exports, cotton, jute, tea, &c., was rapidly disappearing, with the inevitable effect on her demand for silver, and the rupee exchange fell again to 2*s*. At that point the government would willingly have enforced their new price of the rupee at 2*s*., but once more economic conditions were too much for them, and the market value of silver, which early in 1921 had fallen to 31⅞*d*., inevitably carried the rupee down with it to less than the old value of 1*s*. 4*d*. This produced additional trouble in India's foreign trade, for many Indian importers now fell back on the government proposal that the rupee was to be worth 2*s*., and demanded that that rate should be made effective in payment of their foreign debts. From 1921 silver fluctuated from about 30*d*. to 36*d*., carrying the rupee up and down with it. Latterly, still another government Committee was appointed, which in August 1926 reported in favour of the adoption of a new ratio of 1*s*. 6*d*. and recommended certain other important alterations in the Indian currency and banking system.[1]

By the autumn of 1919 the position with regard to the foreign exchanges was becoming so serious as to overshadow every other question. The sterling exchange in New York fell almost steadily till in February 1920 it touched $3.18. In that month the Council of the League of Nations, meeting in London, decided 'to convene an International Conference with a view to studying the financial crisis, and to look for the means of remedying it and of mitigating the dangerous consequences arising from it', and the Conference ultimately met in Brussels on September 24, 1920. At this Conference a great deal was heard of a supposed new theory of the foreign exchanges associated with the name of Professor Gustav Cassel, and which came to be popularly known as the 'Purchasing Power Parity' theory. Though new to the man in the street it was, however, in no sense a new theory, but it attracted so much attention and proved for some time afterwards so important a factor in the view taken by many financial authorities, that it is necessary to treat it rather fully. In effect, it was not a theory of the foreign exchanges in the ordinary sense of the word. The rate of exchange in pre-war days meant the relative value of the standard gold coinages of any two countries, and it was based on the relative weight of pure gold contained in the two coins. This was the Mint par of exchange, and round that point the actual rate of exchange fluctuated within the limits of the gold points fixed by the cost of sending gold from one country to the other. During the War and afterwards, however, the actual currency of most countries had become entirely divorced from gold, and the essence of the P.P.P. theory was simply that when there is no rate of exchange in this sense, because neither currency possesses any intrinsic value at all, the only possible substitute for a rate of exchange is to compare the purchasing power of the two currencies each in its own country, and the actual rate of exchange should theoretically approximate to this purchasing power 'parity'; or, to put it in another way, the relative value of two paper currencies both possessing no intrinsic value at all, can only be estimated by comparing their relative purchasing power through some method of index numbers.

---

[1] *Report of Royal Commission on Indian Currency and Finance,* C. 2687.

Reduced to such a simple form the theory is, of course, axiomatic and really meant nothing at all, but it led to a good deal of misunderstanding in popular acceptance which in the writer's view was largely due to the misuse of the word 'parity'. The man in the street naturally thought that purchasing power '*parity*' meant something the same as the old idea of Mint *par* of exchange, namely, a basic point, fixed according to some definite fact, round which the actual rate of exchange should vary. But the purchasing power parity was not a par at all in that sense; it was merely a relation or proportion between two movable facts represented by the index numbers of each country, both of which were constantly changing, without any basic point or necessary relation between the two. The popular misunderstanding of the theory may perhaps be illustrated by the common idea that in order to get the sterling exchange back to par ($4.86) what was needed was to get the general level of prices in this country down to the same level as in America. That, however, was entirely wrong, because the relative purchasing power of a sovereign in England and $4.86 in New York was never anything like the same before the War when the exchange was at par. The correct application of the theory should have been that if prices in London had returned to exactly the same percentage *above 1914 prices* as that shown by corresponding index numbers in New York, then the conditions would be ripe for a return to the pre-war par of $4.86.

It was obvious, however, that even in this corrected form the theory would not hold good if local conditions in either country, apart from monetary conditions, produced changes in the price of a sufficient number of articles to affect the general index number. In America, for example, the higher level of prices than in England before the War was generally attributed in large measure to the tariff policy, and the introduction of the new Fordney tariff in 1922 would presumably have the effect of raising prices again. Further, in considering the movement of prices in each country it was necessary to differentiate between those commodities which were mainly produced and consumed at home, and others which were the subject-matter of foreign trade and were therefore more liable to be affected by world conditions. Again, there was the question of the reliability of the index numbers as a true indication of the general level of prices. Finally, the theory takes no account of one very important factor in the balance of indebtedness between different countries which very seriously affects the rate of exchange, namely, the movement of credit or capital between the two countries, and the willingness of one to lend to or invest in the other. During the whole of the post-war period this was a most important factor in the sterling exchange, for the U.S. were lending large sums to most European countries, not only in the form of more or less permanent loans, but also in the more fluid form of money in the money market sense, sent to London for employment. In view of all these disturbing conditions, it is not surprising that an attempt to prove the truth of the P.P.P. theory by working out the course of prices and of the exchanges, say, between London and New York, did not establish a very close relation between the actual and theoretical rates of exchange.

The movements of our balance of trade during the convulsion of 1919–21 reflected the abnormal conditions of the times. Exports were the first to recover, but increased imports soon followed, and the apparent excess of imports fell to very small figures. The fall of both during the deflation period was catastrophic, but particularly the exports. All these are, of course, value figures, and it is interesting to compare them with the estimates of volume of exports and imports given in Table XVI. The effect of the post-war conditions on our Invisible Exports and Imports is exceedingly difficult to estimate, but since the War the Board of Trade have periodically undertaken the task of estimating our real Balance of Indebtedness, with results which are embodied in Table XVII. They did not attempt to cover the War period, but the comparison between pre-war and post-war is very interesting.

The problem of the exchanges would have been difficult enough if it had depended only on the balance of trade in actual commodities and services between the various countries, but to this were quickly added two additional factors closely connected with each other, namely, Reparations and Inter-Allied Debts on the one hand, and the inability of most of the belligerents to balance their budgets in the early years after the War, with the consequent necessity of further issues of paper money. It is impossible within the limits of a text-book to give even a summary of the long and complicated negotiations which proved necessary before a commencement could be made with the clearing up of the debt position, but the case of Germany may be taken as an illustration of some of the effects of the attempt to enforce payment of reparations. The popular outcry in every country that 'Germany must pay' was almost irresistible, but it was equally obvious that under post-war conditions Germany not only could not begin to pay reparations for some time after the War, but could not even pay her way through the period of reconstruction without financial assistance from her late enemies. But human nature was too strong for the economists, and under the Treaty of Peace it was provided that Germany must forthwith begin making payment of reparations, while it also became clear that no financial assistance could be expected at that stage either from America or England. The result was a foregone conclusion. In her crippled condition after the War, and especially with the loss of Alsace-Lorraine, Germany could not even make ends meet on her internal budget, let alone pay reparations, except by the fatal expedient of further issues of paper money. It took nearly five years to work out that experience to its logical conclusion, but in January 1924 the mark stood at 21 billions to the pound sterling, at which point even nominal quotations ceased to be worth recording. Thus the old classic case of the French assignats, and even the fate of the Russian and Austrian war currencies, which had hitherto been the awful examples of currency depreciation, were completely eclipsed by the case of Germany, which must surely remain the record for the future, for depreciation could go no farther. After many futile attempts, the Dawes Agreement was at last brought about with American assistance in the autumn of 1924, and Germany was placed in a position to begin the slow and painful process of recuperation.

In the meantime England, alone of the European belligerents, had been able to face that process on her own resources. The very first post-war Budget made heavy provision for the extinction of debt, and in the seven post-war years England paid off nearly 700 million pounds. The agreement concluded with the U.S. in February 1923 will go down to history more as evidence of England's determination to honour her obligations than of the financial wisdom of the creditors who exacted full payment from England of the loans made by America to the other Allies on England's joint responsibility. England, of course, fully realized the value of such a demonstration in the maintenance of her future credit, but the settlement with America was also an essential preliminary to the rectification of the sterling exchange and the resumption of the gold standard, upon which the efforts of the financial authorities were next centred.

Opinion still clung to the view that the only hope of success lay in the nearer approach of the level of prices in England to that in America, either by lowering the former or raising the latter, as was hoped might be the effect of the great influx of gold to the U.S. In fact, the chief importance of the P.P.P. theory lay in the extent to which it was used as an argument by the supporters of the Dear Money policy for bringing down prices in England. In this form it proved a very ready weapon to those whose policy throughout the post-war period was that the credit system in this country must be regulated with a view to the state of the foreign exchanges rather than to the effects of the policy on trade conditions at home. This naturally led to the development of an opposite school who maintained that the recovery of industry in this country was being sacrificed to the exigencies of foreign financial policy and that the restriction of credit was depressing industry by keeping prices down. In March 1925 the Bank Rate was raised to 5 per cent. By that time the exchange had recovered to $4.76 and the authorities apparently came to the conclusion that the time was ripe for taking the final step and formally returning to the gold standard.

The methods by which this was effected were as follows: In his Budget speech on April 28, 1925, the Chancellor of the Exchequer announced that the prohibition of the export of gold would not be renewed after December 31, 1925, to which date it had originally been limited. At the same time the Bank of England was given a general licence to deliver gold for export against any form of legal tender as from the date of the Budget speech. By the Gold Standard Act, 1925 (passed on May 13), it was provided that the Bank of England should no longer be bound to pay its notes in legal tender coin, but that the notes themselves should still be legal tender as formerly. At the same time the obligation to pay currency notes in gold coin was also repealed, while by another clause the provision of the Coinage Act, 1870, authorizing any person to have gold bullion coined at the Mint was confined to the Bank of England alone. In place of these three provisions for the convertibility of bank notes, currency notes, and bullion into gold coin the Act provided that the Bank of England must sell gold bullion to any person in exchange for legal tender in bars of 400 oz. *fine* gold at the price of £3. 17*s*. 10½*d*. per oz., of *standard* gold, i.e. 11/12ths fine, which is approximately £4. 5*s*. 0*d*. per oz. fine.

The object of these provisions was to prevent any attempt by the public to revert to the use of gold coins in actual circulation. Though constituting a fundamental revolution in our whole system of note issue the public accepted them without a murmur, and the whole business of the return to the gold standard passed off without any difficulty, and without any sign of a serious gold drain. As a precaution, however, arrangements were made for substantial credits in New York in case there should have been any indication of such a drain, but these were never required.

Canada was already substantially on the gold standard, South Africa announced her intention of taking the same step on July 1; Australia and New Zealand made the change on the same day as England, while Holland and the Dutch East Indies also acted simultaneously with us. Austria, Czechoslovakia, Germany, Russia, Sweden, and Hungary had already, between 1922 and 1924, been restored to a position of either *de facto* or complete stabilization.

There remained three important countries in Europe which had not yet returned to the gold standard, namely, France, Belgium, and Italy. Belgium was the first to act, in October 1926, by introducing a new unit called the Belga, of which 35 were equal to one pound sterling. The franc, however, was still retained for internal use as 5 francs to one Belga, so that in effect the new rate was 175 francs to a pound, against the pre-war inter-European rate of 25.22. Italy followed in December 1927 but they retained the lire at the new rate of 92.46 to the pound. France was the last to stabilize, in June 1928, with a new rate of 124·21 francs to the pound, roughly half-way between Belgium and Italy. As a matter of fact, France had already been *de facto* stabilized for about two years, for after the crisis of July 1926, when the franc touched 250 to the pound, the prompt action of the Poincaré Government quickly brought the exchange back to about 125, and the only question after that was whether it would be allowed to appreciate still further or whether, as was finally decided, France would take full advantage of the devaluation to that level. It only remains to add that Poland, Denmark, Norway, and Greece also returned to the gold standard in 1927 and

1928. The result of all this was that the only countries which returned to the gold standard at pre-war rates were England, Germany, Holland, Norway, Sweden, and Denmark. Switzerland, of course, never went off the gold standard, while Spain in 1933 was still off gold.[1]

Looking back over this whole period of post-war stabilization it is necessary to consider in the light of subsequent events whether the levels chosen for stabilization were justified. The outstanding examples, of course, are ourselves and France. Did England make a mistake in going back to the gold standard in 1925 at the pre-war rate, and did France, on the other hand, devaluate too much when she stabilized at 124·21 in 1928? The only means of getting an approximate answer is by examining the facts in view of the purchasing power parity theory, and these will be found in a monthly record of relative prices in the U.K. and U.S.A. and the rate of exchange from the beginning of 1920. One interesting fact emerges from this. During the winter of 1922–3 our prices were actually back to par with U.S. prices, but presumably it was out of the question then for us to return to the gold standard because nothing had been done to settle the question of reparations. The German mark was just at the beginning of its ultimate débâcle and practically nothing had been done in any country (except Austria and Russia) towards stabilization. When we did actually return to the gold standard in April 1925 our price level was still above that of the U.S., but from June onwards this was corrected.

As to France, there was very little doubt at the time that the stabilization rate could have been made a good deal higher than it was; in fact during the latter period of *de facto* stabilization the chief difficulty of the authorities was to prevent the franc appreciating. The course of events after 1928 seems to show clearly that France gained very substantially by the low rate, especially compared with the high sterling rate. There is very little doubt that the position thus created had a good deal to do with England's difficulties, which resulted in her being driven off the gold standard in September 1931.

---

[1] See table of the Stabilization of Foreign Currencies in the *Economist*, July 14, 1928, p. 59.

The passing of the Currency and Bank Notes Act, 1928, and the issue by the Bank of England of the new £1 and 10*s*. notes on November 22, 1928, marked the penultimate stage in post-war financial reconstruction. The Act was in the form of an amendment of the previous acts controlling the Bank of England, both before and after 1844. It authorized the Bank to issue bank-notes for £1 and 10*s*., and its most important provisions dealt with the limitation of issue and the security to be held against the notes.

The Fiduciary Note Issue, i.e. the amount of notes which the Bank may issue in excess of the amount of gold coin and gold bullion for the time being in the Issue Department, was limited to £260 millions, and this included the old 'Authorized Issue' under the 1844 Act, which, as already described, had been raised to £19¾ millions in 1923. The whole of this £260 millions was to be covered by securities, but these might include silver coin to an amount not exceeding £5½ millions. This was approximately the amount of silver held in the Currency Note Reserve at the date of the transfer; and this provision took the place of that in the 1844 Act under which one-fourth of the gold, or one-fifth of the total bullion reserve, could be held in silver.

In thus abandoning the old provision of the 1844 Act which allowed the use of silver as a substantial part of the bullion reserve, the authorities in the writer's opinion missed a great opportunity. It appears from the Bank of England's Statistical Summary that of the total note issue, which in 1932 averaged £359,495,000, as much as £263,607,000 or nearly 75 per cent. was in £1 and 10*s*. notes which are payable singly in silver, for the only provision in the new Act for the convertibility of these notes is that they are to be payable in legal tender, and silver is legal tender up to £2. Apart from the right to convert a block of £1,700 of these notes into bar gold, any possible desire of the public to convert them could only be met by payment in silver. It would seem obvious therefore that the proper form of reserve to meet such a development would be silver coinage. It ought now to be realized that the true function of a bullion reserve against bank-notes is simply to make conversion absolutely certain if it should be wanted. Under our system the fact that the Banking Department of the Bank of England held practically all its Reserve in the form of bank-notes confused the issue, because obviously as long as we were on the gold standard the chief use of the Reserve was to meet the possibility of a foreign drain and that could only be met in gold. The notes held by the Banking Department must therefore be convertible into gold. But so far as the notes actually in possession of the public are concerned silver fulfilled all the requirements of a bullion reserve.

The fact that under the 1928 Act the Bank voluntarily gave away its right to hold part of the note cover in silver was of course in line with the policy which they had adopted for so many years of refusing to regard silver as bullion at all, and by so doing they debarred themselves from changing that policy in later years when the right to hold silver would have proved very useful. The decision may perhaps be regarded as to some extent the result of the action of the Government in 1920 in reducing the silver content of the currency to only 50 per cent. Such a debasement of the silver currency naturally intensified the tendency of banking authorities to refuse to regard silver currency as bullion.

With regard to the elasticity of the Fiduciary Note Issue the provisions of the Act were, first, that the amount might be *reduced* at any time by the Treasury on the request of the Bank 'for such period as may be determined by the Treasury after consultation with the Bank' and 'by such amount as may be so determined'. Thus the whole question of reduction was left to the Bank and the Treasury without any control by Parliament or otherwise.

As to any possible *increase* of the Fiduciary Issue the procedure was that if the Bank represented to the Treasury that it was expedient to increase the issue to some specified amount, the Treasury might authorize the Bank to do so for such period not exceeding six months as the Treasury thought proper. Such authority might be renewed or varied from time to time in the same way, but not for more than two years in all, unless Parliament otherwise determined. In the meantime any Treasury Minute authorizing an increase must be laid forthwith before both Houses of Parliament.

At the same time the opportunity was taken to amend certain provisions of the previous Bank legislation on points of detail as follows:

(1) The new notes may be issued at any place out of London without being made payable at that place, but wherever issued they are payable only at the head office of the Bank.

(2) The new notes are legal tender in Scotland and Northern Ireland as well as in England.

(3) The curious provision of the Bank Act, 1833, under which Bank of England notes were legal tender 'for all sums *above* £5', but not actually for £5, was amended, and bank-notes are now legal tender for the payment of any amount. This of course does not make a £5 note legal tender for a debt of less than £5, i.e. it does not confer on the debtor the right to demand change. Such a right of course has never existed.

(4) The Gold Standard Act, 1925, § 1 (i) had relieved the Bank of England of its obligation to pay any of its notes in legal coin, which of course meant gold. The new Act provided that, as long as this section remains in force, the new notes were to be legal tender by the Bank including the payment of their own bank-notes. Apparently, therefore, the Bank of England, on being asked for payment of any of its larger notes

can do so in £1 or 10*s*. notes, and the only legal tender coin which the holder can demand for these notes is silver. This is of course only the logical consequence of the 1925 Act, which abolished the convertibility of bank-notes into gold, below the limit of 400 oz. fine gold or approximately £1,700.

(5) The new notes were to be valid payment of wages, thus repealing the former provision of the Truck Act, 1831, to the contrary.

The following is the first issue of the Bank Return in its new form, giving effect to the necessary changes:

Weekly Return of the Bank of England for week ended 28th November, 1928.

ISSUE DEPARTMENT

	£		£
Notes issued:			
In circulation	367,001,148	Government debt	11,015,100
In Banking Dept	52,087,797	Other government securities	233,568,550
		Other securities	10,176,193
		Silver coin	5,240,157
		Amount of fiduciary issue	260,000,000
		Gold coin and bullion	159,088,945
	419,088,945		419,088,945

BANKING DEPARTMENT

	£		£
Proprietor's capital	14,553,000	Government securities	52,180,327
Rest	3,254,001	Other securities	
Public deposits	21,452,051	Discounts & advances £13,586,293	
Other deposits:		Securities £20,214,855	
Bankers £62,379,409			
Other accounts £37,185,203			33,801,148
	99,564,612	Notes	52,087,797
7 day &c., bills	2,649	Gold & silver coin	757,041
	138,826,313		138,826,313

It will be noticed that in addition to the changes affecting the Issue Department the opportunity was taken to make some changes in the Banking Department also. On comparing the new form with that given in Table XI in the Appendix, it will be seen that the 'Other Deposits' have been split into 'Bankers' and 'Other Accounts', while the 'Other Securities' have also been divided into 'Discounts and Advances' and 'Securities'.

The figure of £260 millions for the Fiduciary Issue was just a little less than the maximum for the year 1928 under the Cunliffe Committee's rule. On August 3, 1927, the Currency Note Issue was £300,885,000 less £56,250,000 gold and notes, making the Fiduciary Issue £244,635,000, which therefore became the maximum for 1928. Adding to this the Authorized Issue of £19,750,000 the total was £264,385,000.

It will be convenient to refer here to the experience of the years immediately following the passing of this Act in order to see how the new elasticity of the Fiduciary Issue worked out in practice. The first point to be noted is that the fixing of the Fiduciary Issue at £260 millions, which as it turned out was rather a high figure, produced perhaps accidentally a result which the public never realized. During the next three years both the Total Note Issue and the actual Circulation on the whole declined. Now the true test of the strength of the note cover is the percentage of gold held by the Bank against the notes actually in the hands of the public, for the notes held by the Banking Department ought really to be regarded as covered by 100 per cent. gold and should be deducted both from the total note issue and from the total gold held against the notes. On that basis the true percentage of what may be called the Note Gold to the actual Circulation can be followed week by week and it works out in a very interesting way: the smaller the Circulation the smaller the percentage of Note Gold. This is best explained by an actual illustration of two contrasted dates as shown on the following page.

	Dec. 26, 1928	*Feb. 17, 1932*
Total Issue	£413,784	£395,766
In Banking Dept.	25,541	50,884
Circulation	388,243	344,882
Total Gold	£153,784	£120,766*
In Banking Dept.	25,541	50,884
Note Gold	128,243	69,882
Per cent. on Circulation	30 0	20·3

* Fiduciary Issue £275,000.

A column has been added to Table XII (*b*) giving this percentage of the Note Gold to Circulation throughout the period since 1928, and the result is very striking. It appears that for a time we were working our note circulation on a much smaller percentage of gold cover than ever before, and incidentally much smaller than any other country in the world at that time, for many countries by statute provided a figure of 40 per cent. as the necessary minimum of gold cover for their note issue.

Thus England seemed to be leading the way in an important reform of monetary practice. Now that the use of gold for internal currency has practically been abolished in every country there is no longer any need to hold any substantial proportion of gold cover against internal currency. The only purpose of such a bullion reserve was to ensure that if for any reason the public took it into their heads to distrust the notes they could convert them into bullion. But the only reason why such distrust should ever arise was the danger of over-issue, because it was only an over-issue that could cause the value of the currency to decline as against bullion, or in other words, could send gold to a premium. All the bullion reserve that was ever necessary therefore was just enough to run off by conversion any accidental over-issue, which it must be remembered could result from a sudden restriction of currency requirements, as well as from an actual increase of the issue.

But in modern times the whole situation has been changed by two facts, first that the note issue is now everywhere under strict government control, and if the Government can be trusted not to indulge in deliberate over-issue there is no need for any large bullion reserve. Second, now that the public have no right to convert their notes into gold but merely into subsidiary coinage, the only reserve necessary is a reserve in that subsidiary coinage and a great deal less than 40 per cent. would be ample.

The last stage of post-war reconstruction came in June 1929 with the revision of German Reparations under the Young Plan. This finally wiped out the astronomical figure of 132 milliards of Reichsmarks (£6,600 millions) which was fixed in 1921 as the total of Germany's obligation, limited the annuities payable to approximately 60 years, and reduced the amounts to figures which the experts believed could in fact be both paid and transferred by Germany, and which would finally approximate to the amounts payable by Germany's creditors to America. But perhaps the most important part of the new plan was the establishment of the Bank for International Settlements which took the place of all the complicated arrangements under the Dawes Plan for the transfer of Germany's payments in marks into the foreign currencies necessary to pay her various creditors. Each annuity was to be paid by Germany to the B.I.S., but instead of these shares being paid over forthwith to the creditors they were to lie in the B.I.S. till they became payable in turn to the United States. Thus all the cross payments between Germany, the Allies, and America were to be settled by the B.I.S. after the manner of a Clearing House.

But the framers of the constitution of the B.I.S. envisaged the development of much wider uses for the new International Clearing House. It was provided that any of the constituent Central Banks could deposit gold with the B.I.S. and use these deposits when required to meet foreign payments of any kind.

The idea was gradually to dispense with international gold movements; each country would keep an account with the B.I.S. and international payments would be made by a transfer from one account to another without any gold passing at all. The possibilities of such a scheme were immense but its development would obviously require time, if only for one reason because it required legislation in every country to empower the Central Bank to accept gold or funds lying to its credit in the B.I.S. as part of its Gold Reserve as if it were gold in its own safes. The location of the B.I.S. was naturally a question of much heart-burning, the problem of what would happen to the gold reserves in case of war being of course insoluble, but Basle in Switzerland was finally accepted as a compromise.

CHAPTER XIV

THE AFTERMATH OF THE WAR, 1929–31

The American boom and crash.—Fall of prices.—German difficulties.—England driven off the gold standard —Causes of the fall of prices, alleged shortage of gold, credit facilities, currency.—Loss of confidence.

THE previous chapter brought the history of the post-war period down to the re-settlement of the Reparations question by the Young Plan in 1929 and the establishment of the Bank for International Settlements. It was hoped that this was to be the final stage of post-war reconstruction, but as a matter of fact it proved to be only the beginning of a period in which many things that had been done since the Armistice had to be undone again.

Looking back, it is possible now to trace the beginning of the trouble to the New York Stock Exchange boom which reached its peak in 1928–9. After the world deflation slump of 1920 the United States had made a very quick recovery. As the result of the War they were now a creditor country to a very large extent. Internally the country was very prosperous, and they were also establishing their hold on many markets outside of America. The Fordney Tariff of 1922 had raised still higher the tariff wall which protected their home markets, and as this largely prevented the payment of the world's debts to America in goods and services they had received enormous sums in gold, which made their gold reserves the largest of any country in the world. They of course realized that this huge gold holding was undesirable, apart altogether from the sheer physical cost of housing it, but as all their efforts to reduce it produced only a trifling effect their main anxiety was to prevent it resulting in an inflation of credit and rising prices, a policy to be stigmatized later on as that of 'sterilizing' the gold. They did succeed to a considerable extent in preventing a rise of commodity prices, but it was not recognized till afterwards that their policy had entirely failed to prevent a rise of prices in another direction, namely on the Stock Exchange. Until 1928 the boom was kept within fairly reasonable dimensions, but in that year it began to be realized that it was going too far and all the efforts of the banking authorities in America to check it were unavailing. One result was that short loan money for employment on the Stock Exchange began to command very high rates, which not only attracted money from other uses in America to the Stock Exchange but very soon began to draw funds from abroad. This made it no longer profitable for America to go on lending money abroad, as they had been doing to a very large extent since the Armistice, and particularly it stopped America's loans to Germany.

The effect on the London Money Market was very serious. Heavy drains of gold necessitated the raising of the Bank Rate from 4½ to 5½ per cent. in February, 1929, and again on October 2, to 6½ per cent. In the meantime the Hatry smash in September had given London a severe shock. The Wall Street boom had gone so far that almost any check on it was bound to produce the inevitable burst, but it matters little now what actually brought about the crash. The fact is that it came to a head about October 25, 1929, when the world entered on a period of falling prices which in its duration, if not in its rapidity, proved to be even greater than the deflation slump of 1920. Stock Exchange prices of course led the way, but commodities followed, some much more quickly than others.

As time went on it became clear that this new fall of prices was something worse than the mere cyclical movement of prices through a fall to a natural recovery. In normal circumstances such a fall of prices would soon have produced an increase of consumption which would again balance supply and demand. But by the early summer of 1931 it became obvious that in this case there was some deep-seated cause at work which was preventing the swing of the pendulum, and developments on the Continent soon began to indicate the centre of the trouble. Germany was particularly hard hit by the fall of prices because ever since the Dawes Plan of 1924 she had been struggling to pay reparations and could only do so by developing her exports and creating a favourable balance. Until the Young Plan of 1929 it had been impossible for her to do so to any material extent, and she was meeting her debt payments largely by fresh borrowing. With the fall of world prices during 1930 it became increasingly difficult for her to pay anything, and when the loans from America stopped it was obvious to those who were in touch with Germany that a complete breakdown could only be a matter of time. Germany of course did everything possible to maintain her balance by the most drastic economies and by emergency decrees restricting foreign trade, but all these measures proved entirely ineffectual and in May 1931 the situation was rapidly approaching a crisis.

In that month the Credit Anstalt, which was virtually the Austrian National Bank, had to suspend payment and the Bank of England immediately came to the rescue with a loan of £4 millions sterling. France would naturally have shared in this loan but at that time Germany and Austria had just sprung upon the world the proposed Customs Union between them, which the French authorities regarded with suspicion as a first step towards a political union. They therefore wished to make the abandonment of this scheme a condition of their sharing in the loan, and the Bank of England was left to take it up alone.

All this, however, was merely the signal to Germany's creditors to expect similar trouble there. This led to heavy withdrawals of foreign funds, and early in June it was obvious that Germany was on the verge of bankruptcy. Fortunately, the Secretary of the U.S. Treasury, Mr. Andrew Mellon, was in Europe at the time and quickly realized the gravity of the situation. After consultations in London and Berlin he got into direct communication with President Hoover on the then new transatlantic telephone and made it clear to him that unless something was done immediately Germany's bankruptcy would involve the loss of all the loans by America to Germany still outstanding. The result was that on Saturday, June 20, 1931, there being no time to go through the usual process of diplomatic consultation with all the countries concerned, Hoover on his own authority announced a moratorium of one year for all the war debts due to America. This was received everywhere with acclamation and was quickly followed by a joint loan of $100 millions by America, England, France, and the B.I.S. to Germany. England and every other country except France immediately fell in with the Moratorium scheme, but France of course had most to lose by the cessation of all payments, because she was receiving a substantial net balance, and she therefore made certain difficulties about accepting the scheme. The consequent delay went far to destroy the psychological effect, and by the time France did finally agree (on conditions) it began to be doubted whether Germany was saved after all. A Conference of representatives of the Powers most involved met hurriedly in London on July 21, but they were only able to suggest stopgap measures.

In the meantime, however, the trouble was rapidly extending, and by the middle of July it began to be whispered about the world that even England was in danger, for it became known that English bankers had been making large loans to Germany which were now completely frozen, and it was reported that some of the Accepting Houses in London were seriously involved. On July 15 the Report of the Macmillan Committee[1] was published and showed that for some time back London had been receiving large sums from various countries (especially France) on short-loan terms, much of which had been lent to Germany either on longer terms or in short loans which had now become frozen. As the result of this London was owing a net balance of about £250 millions to foreign countries, and although the figures showed that the amount had actually been a good deal larger during 1930 the publication of this balance still due came as a surprise to our foreign creditors, and gave a severe shock to our credit abroad. The result was heavy withdrawals of gold from London, especially to France. This drew attention to the fact that, in the flight from the franc before France stabilized in 1928, many Frenchmen had placed large funds abroad for safety, and since 1928 circumstances had not been favourable for the repatriation of all this money, with the result that very large sums were still lying in London and New York.

---

[1] Committee on Finance and Industry, 1931, Cmd. 3897.

The Bank Rate had fallen rapidly after the Wall Street crash from 6½ to 2½ per cent. in May 1931 in the hope of countering the fall of prices by creating easy money conditions, but on July 23 it was raised again to 3½ per cent. in the endeavour to meet the new drain of gold, and a week later it was raised again to 4½ per cent. but without avail; in these two weeks the Bank lost over £30 millions of gold. On August 1 it was announced that the Bank had arranged a credit of £50 millions with France and America and at the same time the Fiduciary Issue was raised to £275 millions, though this was merely a precautionary measure to provide for the usual increase of circulation for the Bank Holiday. The effect, however, was probably to add to the feeling of uncertainty abroad, and the withdrawals of gold continued.

On top of all this, by an unfortunate concatenation of circumstances, came the publication of two further government reports which it is now realized did incalculable harm. In March 1931 the Labour Government had appointed a Committee on National Expenditure known as the May Committee, and their report appeared on July 31. It painted a very gloomy picture of prospective budget deficits and stressed the need for drastic economies especially in the Unemployment Fund. This was quickly followed by an Interim Report of the Unemployment Committee which pointed out that the Unemployment Fund had drifted into a hopelessly unsound position. Ever since 1921 the unemployment position had been very serious and the fund had only been kept going by heavy annual borrowing; and as there was no hope of an early return of prosperity which would once more place the fund in a solvent position this accumulation of deficits could not go on. The annual deficit must therefore be faced out of the year's revenue, which of course only made the Budget position worse than ever.

It is clear now that if the authorities had wished deliberately to engineer the downfall of England's credit they could not have adopted any more certain method. Whether they realized that or not there can be no doubt that the politicians entirely failed to realize the gravity of the position; on the contrary they thought they saw in all these reports a chance to snatch a party advantage. Ever since the War the agitation for protection had been growing in volume, but since the beginning of the depression it had become increasingly strong, and its chief protagonists now saw their chance to replace the Labour Government with a protectionist government and at the same time cut down expenditure on the social services. The result was that on these various reports they started a cry of economy (especially in the direction of cutting the unemployment allowances) and protection, and it seemed as if everything played into their hands. On August 24 *The Times* announced that the £50 millions credit from France and America was exhausted. The same day saw the announcement of the creation of the National Government, a coalition between the Conservatives and parts of the Liberal and Labour parties, including the Labour Prime Minister. Further credits had to be raised but this time it was decided that it must be on the responsibility of the Government, not of the Bank of England as in the former case, and a new credit of £80 millions was arranged by the Treasury from France and the U.S.A.

The next move was the introduction on September 10 of the Supplementary Budget in which the Chancellor of the

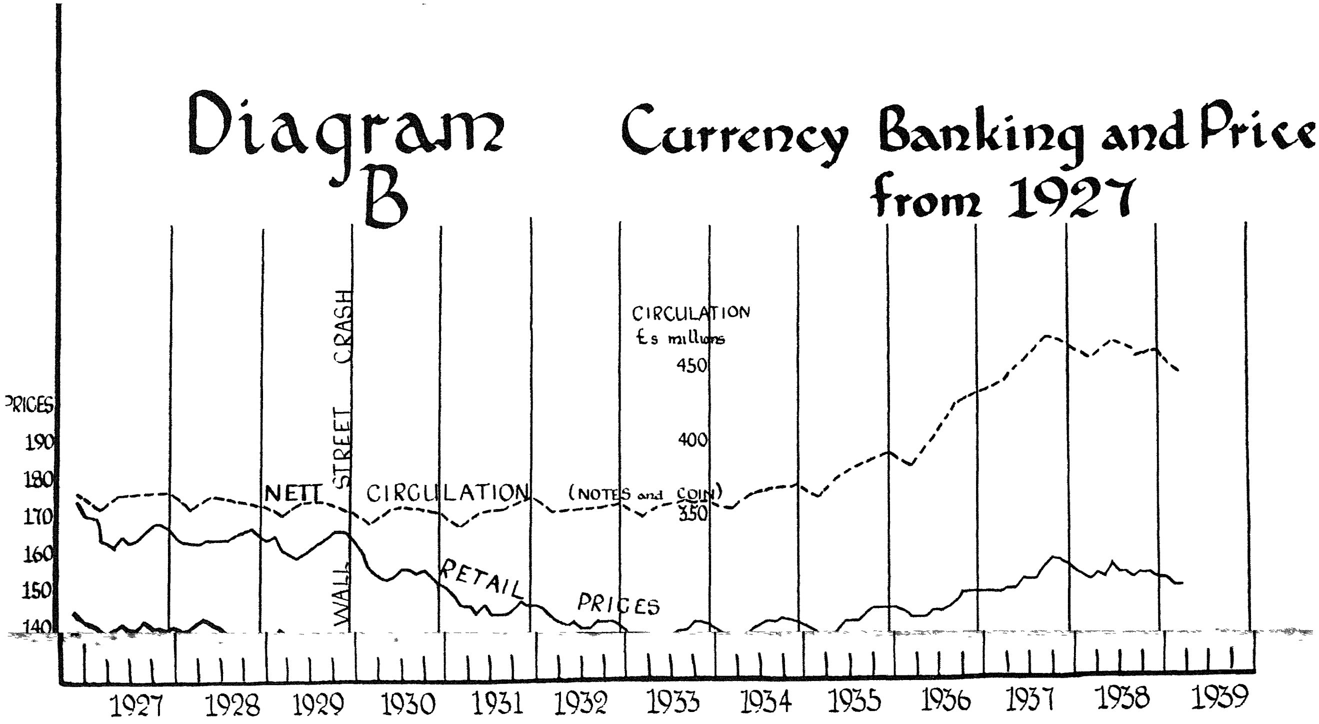
Exchequer made great play with the danger of inflation and the terrors of England going off the gold standard, using the parallel of Germany to enforce the necessity of drastic economies, which included a 10 per cent. cut in the salaries of all the various services for which the Government are more or less responsible, including the teachers. The country accepted this as the only way to meet the painful necessity of balancing the Budget; but no sooner was this done than a new cry arose that it was not sufficient to balance the Budget; we must also restore the balance of trade. It was pointed out that the excess of visible imports, which had always been heavy, was no longer being balanced by the invisible exports, namely payments from our debtors and investments abroad, because world depression had made the foreigners unable to pay; and this argument was made the ground for a renewal of the cry for protection and a demand for a general election. The last incident in the whole business was perhaps the most regrettable of all. The introduction of wage cuts had of course caused a great deal of soreness, but on September 15 a misunderstanding on board one ship of the Fleet at Invergordon resulted in a refusal of duty which was immediately magnified into a mutiny in the Fleet. This created a tremendous impression abroad and was probably the last nail in the coffin of England's credit.

The last stage of the débâcle may be very briefly described. Gold withdrawals continued, especially to Holland, where it appeared our authorities had not thought it necessary to peg the exchange as they had done in Paris and New York. The crisis came to a head on September 19 with the first Saturday opening of the Stock Exchange. Heavy sales from Amsterdam and from Wall Street caused a severe slump in quotations, and in New York after our close things went still worse. It was known in inner circles at least that the second credit of £80 millions from France and America was exhausted, but it was only known to the authorities that an application for further credits had been practically refused. By this time the gold in the Bank of England was reduced to £130 millions, which happened to be exactly the amount of the two credits from France and America. That may have been merely a coincidence, but the fact remains that over the week-end the Cabinet decided to suspend the gold standard and the announcement appeared in the press on Monday, September 21. The necessary legislation was rushed through Parliament that day, the Bank Rate was raised to 6 per cent., and the Stock Exchange closed.

Before going on to deal with the effects of England's departure from the gold standard it is necessary to describe more fully the real causes which underlay the events that actually led up to it. The immediate cause was the loss of confidence in the Bank of England on the part of our foreign creditors because it was realized that our foreign debtors were no longer in a position to pay us; for while the unsatisfactory position of our internal budget no doubt contributed to the loss of confidence, the major cause was the unfavourable balance of trade. That was due, in the first place, to the fact that our exports were falling off, which was attributed (largely on our own statements) to high costs of production and particularly wages, but the real cause of the disequilibrium was the failure of our invisible exports, especially the inability of our foreign debtors to make their usual payments of interest and the reduction of our income from services rendered abroad, especially shipping. But all these were directly due to the world economic depression resulting from the steady fall of prices; the real objective of the inquiry therefore is to discover the causes of the fall of prices.

The first essential is to get this stage of the post-war fall of prices into its proper perspective with the previous stages. Diagram A gives the history of prices during the War and the deflation slump, continued to the end of 1926, while Diagram B continues the history of prices to date. The first thing to be noted is the marked absence of continuity in the fall. From the

Diagram B Currency Banking and Price from 1927



low point of 1922 there was, on the whole, a rise to January 1925 followed by a steady fall to a new low point in May 1926, then a six months' rise and another fall to April 1927. Then came a period of fully two years of comparatively steady prices till October 1929 when the great slump began.

It may pertinently be asked what caused that period of comparatively steady prices. Why did the slump of 1920–22 not continue until prices were back to pre-war level? The natural expectation at the time was that it would do so, but as time went on and the fall seemed to be definitely checked the general opinion swung round to the view that the new level of about one-third higher than pre-war had come to stay. Yet no one seemed to be able to explain why prices should remain above the pre-war level; on the contrary, it was evident before 1929 that world supplies of all commodities had completely recovered from the War shortage and in many cases were much larger than they had ever been. In iron and steel for example, and all the industries depending on them, war equipment had been converted to civilian purposes, and the world's potential output was greatly increased. At the same time, rationalization had resulted in cheaper production, if not always larger. In agriculture the advance of science and mechanization had done a great deal to increase the product and lower the cost. Even in cotton, where neither science nor mechanization could do much, the world's supplies in 1926, thanks to a huge American crop, established a new world's record, and in that case prices did fall for a time to pre-war levels, but the immediate result was an enormous increase of consumption, especially in America, and this suggested an explanation of the period of steady prices up to 1929. The boom in the United States was the expression of a great wave of apparent prosperity involving enormous consumption. Many people were uneasy even at the time that this prosperity was fictitious, that consumption was being swollen by the instalment system, and that exports, especially to European markets, were being forced by loans;

but there is no doubt that the subsequent collapse of consumption began in America, though it spread very quickly to the whole world.

An examination of the varying degrees of the fall in prices of different commodities brought out the fact that the commodities which had fallen most rapidly were those in which America accounted for a large proportion of the world's total consumption, and this suggested that the fall of prices was primarily due to the American crash. As the result of the loss of Stock Exchange values, and in America all classes were involved in speculation, every one felt very hard up and reduced their consumption not only of luxuries, but also of comparative necessaries. The resulting fall in wholesale prices owing to the restriction of demand soon spread throughout the world and produced a cumulative effect in reduced purchasing power everywhere, which again reacted on world prices. Thus the major cause of the fall of prices from 1929 onwards was the sudden restriction of demand beginning in America, in marked contrast to the previous period of artificial prosperity there.

But even if it be argued that the fall of prices after October 1929 was merely the natural but long-delayed completion of the post-war slump, the question still arises why it lasted so long. The 1920 slump touched bottom in 1922 even in England, and much earlier in America. If there is anything in the idea of the trade cycle, a slump ought to bring the natural recovery in its train, because the fall of prices promotes increased consumption and sets things moving upwards again. Why was that recovery so long delayed in this case?

To take a number of smaller causes first, one reason was that the fall in wholesale prices was not sufficiently reflected in declining retail prices which would have tempted increased consumption. Just as during the War retail prices lagged behind wholesale on the upward sweep, so the fall of retail prices lagged behind the downward movement from 1920 onwards. This comparison of course must not be pressed too far. In the first place, the commodities included in the two index numbers are not the same, and particularly the index of wholesale prices is dominated by raw materials. Again, the retail index number, which is really an index of the cost of living of the working-classes, contains items, such as rent, which are not in the wholesale index number at all. But the main reason for the divergence is just the fact that one is wholesale and the other retail. Wholesale prices, especially of raw materials, are largely world prices, more or less subject to free competition. Retail prices, on the other hand, contain a large element of wage costs both in production and distribution, and as wages had admittedly fallen slowly after the War these costs remained comparatively high and prevented the price of the finished goods from falling as rapidly as the raw material.

But there is a further factor which must be mentioned. Owing, on the one hand, to the development of rationalization, which in most cases meant monopoly through a combine and price fixing, and on the other, to increasing tariffs, retail prices had been prevented from falling as fast as they might have done in view of the reduced costs of raw materials. The fact is that the war-time psychology both of the manufacturers and the middlemen persisted too long. They had got into the habit of being able to charge high prices and they were loath to cut them down again; it was easier to do a restricted trade at high prices than a larger trade at cut prices. It was not only private traders who were resisting the downward movement of prices; all kinds of sheltered trades were following the same policy. The railway companies resisted every proposal to return to the pre-war standard passenger rate of a penny a mile, though latterly they were compelled to give all kinds of concessions in special daily rates, excursion tickets, and the like, when road competition began to make them feel the pressure of declining traffic. Shipping companies too through the various conferences or price-fixing arrangements kept their first-class passage rates far above pre-war levels, though they had to introduce other rates, e.g. the Cabin tariff ships and Tourist third traffic which soon took the bulk of the trade. The Government also adopted the same policy, for even in 1939 they had not returned to the pre-war penny postage, although it was admitted that the Post Office was making a profit more than sufficient to cover the difference. Thus, instead of meeting hard times by cutting prices, the tendency of the producers everywhere seemed to be to try to keep up prices artificially against the depression, e.g. the Brazilian Government's valorization scheme for coffee, and the attempts of the Federal Farm Board in the United States and the Egyptian Government to maintain the prices of their cotton crops. The only alternative seemed to be schemes to maintain prices by restricting production by agreement among the world's producers, and such schemes were attempted with varying success in tin, rubber, copper, tea, &c. Finally, the growing tide of nationalism was interfering on every hand with free competition, e.g. by countries restricting passenger movement to their own ports and their own ships (and these generally had to be subsidized) and by piling up higher and higher tariffs on imports in the interest of national industries.

Unfortunately, however, instead of the Governments and the experts of the world devoting their attention to the remedies for these causes of the trouble, their attention was distracted by other theories as to the causes of the fall of prices, particularly monetary causes. The foundation of the whole argument was that the world's gold supplies were not increasing fast enough to maintain the general level of world prices, in accordance with the Quantity Theory of Money, and that the existing supplies had become very badly distributed owing to the concentration of huge gold holdings in France and America where, especially in the latter case, they had been sterilized, so as to prevent their having the natural effect in a rise of prices. The argument was that this shortage of gold was merely continuing and intensifying the deflation policy which it was said had been applied to bring England back to the gold standard in 1925.

The first essential is to get a clear view of the facts on this question. Table I gives the history of the world's production of gold, while Table III shows the gold reserves of the central banks of the world since 1913. A comparison of these two tables at once brings out that the increase of gold reserves, which may be called the world's visible gold supply, from 1913 to 1932 was apparently almost equal to the total gold production of the world during that period, for the world's total estimated gold production was £1,576 millions, equivalent to about $7,500 millions at par, while the gold reserves of the central banks increased by about $7,000 millions. This is, on the face of it, extremely improbable, for we know that a percentage of the world's annual gold production goes into industrial uses and into hoarding; before the War this used to be estimated at about one-third of the total. But an examination of Table III immediately suggests one obvious explanation. In England alone the gold reserves in 1913 were only $170 millions; in 1920 they had apparently increased to $763 millions. But it is well known that that apparent change is entirely fictitious, the explanation being that during the War practically all the gold in currency in the country (which was estimated by the Cunliffe Committee at about £123 millions) had been drawn into the Bank of England. There is no doubt that a similar change had taken place in many other countries (e.g. Australia), for the whole tendency had been to concentrate each country's gold holdings as far as possible in the central bank, and this policy had been very effective.

But from the present point of view the chief interest of Table III is in the later years. The United States almost doubled their gold holding from 1913 to 1920, but the increase continued steadily till 1924, and after a slight reduction to 1929 it piled up again, till at the end of 1932 they held about one-third of the world's total. But even more striking is the case of France, whose gold reserves remained roughly at pre-war level till 1926 and then began to rise rapidly, till at the end of 1932 they had not much less than America, so that at that date France and America between them held about 61 per cent. of the world's total. But the curious fact is that while America and France were piling up these enormous totals the rest of the world had not begun to suffer any diminution till 1929, and since then their net loss had been a great deal less than the gain in the U.S.A. and France. The truth is that since the War the world as a whole had been to some extent concentrating its gold supplies in the central banks, which of course is the proper place for them, because the right use of gold is not in circulation, but to serve as the foundation for the pyramid of credit which is the world's real supply of money.

That, therefore, raises the second form of the theory that there was too little 'money' in the world in the sense that supplies of credit had been restricted in accordance with some policy of deflation, and that this was the cause of the fall of prices. It is of course impossible to deal statistically with the facts for the whole world on this question, but some light may be thrown on the general question from the experience of this country, and the relevant figures are shown on Diagram B. From this it appears that deposits on the whole continued to increase till the end of 1930, and the sharp relapse in 1931 was almost certainly due to the approach of the crisis in September of that year. The decline in the Clearing House turnover began a year earlier but even that was six months after the fall of prices began. The effect of the new cheap money policy from June 1932 upon the deposits and upon prices will be dealt with later.

But it is possible to get further light from the banking statistics by examining the way in which the banks distribute their deposits among their various borrowing clients, and in order to bring out the extraordinary development during this period these figures are shown in Diagram C. The feature of this diagram is the change in the relative position of the three main avenues of employment for the bank's money, namely, Loans and Advances, Discounts, and Investments, and it will be seen that from 1929 onwards the normal position was completely reversed. The amount of Loans and Advances fell to a relatively low figure, while those of Discounts and Investments rose almost exactly in proportion. The explanation is that the banks prefer to use their money in Loans and Advances because they get a better rate of interest on these, but from 1929 they found it increasingly difficult to do so, because owing to the depression traders of all kinds had not been able to find profitable use for borrowed money. This indicates the answer to a view very commonly held that the banks regulate their creation of credit or the amount of their Loans and Advances simply by the amount of funds they have available, i.e. the amount of their deposits less the supposed conventional 10 per cent. which they must retain in cash, so that the state of industry and trade depends on the amount of credit the banks are willing to supply. So far, however, from this being true the fact is that the amount of the banks' Loans and Advances is the *result* of the state of industry and trade. The banks are always willing to lend to credit-worthy borrowers, but that implies more than merely that the borrowers have good securities to offer: they must have a profitable use to which to put the money. Cheap money is only one factor in good trade; the other is confidence, which in the long run rests on the hope of rising prices and potential profits; and, as will be seen later, the complete absence of that confidence was the outstanding feature of the later stages of the depression.

Another side of the same question is that very often large figures of bank deposits merely mean that business is bad; business men having nothing to do with their money—no profitable employment for it in their business—simply let it lie in the bank till they can use it again. Some evidence of this is found in the fact that when trade is good the proportion of Current Accounts to total deposits rises, while when trade is bad more of the deposits are on proper deposit terms and less on current account. The Macmillan Committee gave separate figures of Current Accounts and Deposits (see Table XIII (*b*)), and these figures have since been continued by the Bank of England. A line showing the proportion of current accounts to the total deposits is therefore shown on Diagram C.

Incidentally, another line on this diagram shows the Clearing Banks' Cash as a percentage of the total Deposits and it will be seen that this does not bear out the idea of a fixed proportion of cash to Deposits. On the contrary, the line shows constant variations, especially in the June and December figures against the intermediate quarters, and it also shows long-period changes in the percentage.

As there were apparently still some people who thought that 'money' meant currency, and that the complaint of too little money was in some way connected with a restriction of the note circulation (which is of course the greater part of our currency), it is necessary to examine the facts on this point also. Until recently we had very little information about the volume of the currency except the note circulation, but in 1932 the Bank of England began to publish a statistical estimate of the whole currency of the country, and they have carried these figures back to 1921.[1] It is therefore possible to trace the movement of the total currency throughout the whole of that period, and a line showing these figures has been added to Diagram B. From this it will be seen that after a slow decline from 1921 to 1929 the movement during the whole period of the great decline of prices was negligible.

There is, then, no ground for the assertion that there was too little money in any sense of the word, in this country at least. The great change in our system up to, say, 1932 was that we had been learning to do with less gold. As already described in Chapter XIII, we had learned, perhaps by accident, that a much smaller percentage of gold cover was ample for our note circulation, and we had also been feeling our way towards a policy of making our gold reserves work more easily, in the sense that we could suffer a considerable loss of gold at times without adopting the stringent measures that were formerly thought necessary to protect it by raising the bank rate, and so on. The trouble was that other countries had not been able, or had not seen fit, to follow our example in this matter, and the worst offenders, of course, were France and America. But it was not so generally recognized that their enormous accumulations of gold had been not so much a matter of policy but had resulted inevitably from their position as the chief creditor countries of the world. America was normally a creditor country with a substantial balance of visible exports, and to this was now added her enormous debt payments. France was also a creditor of other countries for reparations, but the main cause of the great flow of gold to France was to be found elsewhere. Before she stabilized her currency in 1928 France had passed through a very bad time when in 1926 the franc went as low as 250 to the £, and France seemed to be in danger of following Germany's example of inflation. During this period there was naturally a flight from the franc, and large sums of French money were put away abroad, especially in England and America. After 1928 a great deal of this money was repatriated, but not by any means all of it. This was inevitable though the French owners received a very small return on this money, and the fact that so much of it was still lying abroad in 1931 was due mainly to the fact that the French owners had no profitable employment for it at home.

---

[1] See Table VII (*b*).

But it cannot be too strongly emphasized that these enormous accumulations of gold in America and France were a *symptom* of the real trouble rather than the cause. To take the case of America, her debtors could not pay America in goods because of rising tariffs, which were raised still further by the

Hawley–Smoot tariff in 1930. Even before England's abandonment of the gold standard in 1931 started a new wave of trade restrictions mainly based on the chaos of the exchanges, almost every country was piling up higher tariffs and imposing further trade restrictions. Some of these were in self-defence to protect their balance of trade; others were the result of what can only be described as nationalism run mad. The result was that all the debtor countries were finding it more and more difficult to pay their debts in the natural way in goods and services, and the only alternatives were either to pay in gold or to get new loans. Up till 1928 America had been lending freely, but, as already described, that was stopped by the stock exchange boom in 1929. France, which before the War had become a great lending country, had never resumed her position in that respect since the War. Until the stabilization of the franc in 1928 it was, of course, impossible for her to do so, but even after that the French people were very unwilling to lend abroad, largely because of their bitter experience with many of their pre-war loans, especially to Russia. But there was a new feature since 1928 in the position of France in that her authorities had developed a policy of making political terms through loans. France seemed to be aiming at a financial hegemony of Europe, and her loans were largely dictated by her political ideas, the mainspring of which was, of course, her fear of Germany.

But whether or not the fall of prices was in any way due to a reduced supply of gold, the fact remains that every one was blaming all the trouble on that, and there was very grave danger in this attitude because there seemed to be no hope of a remedy. The world's production of gold was a physical fact about which it was thought that nothing could be done. The Financial Committee of the League of Nations in a report dated September 1930 gave statistics showing the actual decline of gold production in recent years, along with estimates by some of the best authorities of the probable future production, and all of these indicated the probability of a further decline. As there seemed to be no hope of making France and America alter their policy and disgorge their hoards of gold, the result was to produce throughout the world a general feeling of despair leading to a gradual loss of confidence in the prospect of recovery. It was felt that world affairs had got into a hopeless tangle with war debts and reparations, economic nationalism and tariffs; and there seemed to be no way out. The result was a vicious circle of falling prices due to lack of confidence which was carrying the prices of many commodities far below their cost of production, but, in spite of the tempting level of prices and the ample supplies of money, no one had sufficient confidence to buy, because they were afraid that prices would fall lower still, which, of course, was just what they did. The various schemes for restriction of production either broke down or proved ineffective, and time after time prices seemed to have got the turn at last, but once more it proved a false hope. Thus things were allowed to drift from bad to worse, and in the spring of 1931 it was obvious that Europe was on the verge of a breakdown. With the falling prices of all her exports Germany obviously could not go on paying reparations under the Young Plan. The Austrian trouble was merely the match that started the conflagration. Hoover's moratorium might have saved the situation but for France's delaying tactics, but it also failed completely, and the result was that England was driven off the gold standard in September 1931, and thus opened a new chapter.

CHAPTER XV

OFF THE GOLD STANDARD, 1931–36

Effects: (*a*) On England; prices and the rate of exchange; the balance of trade. (*b*) On other countries.—Continent.—Egypt and India.—America; reflation.—War debts and reparations.—Exchange Equalization Fund.—U.S. banking crisis, America goes off gold; devaluation; the New Deal.—Breakdown of the Gold Bloc Tripartite Agreement.—Cheap money.—Open market purchases.

THE effects of England going off the gold standard were world-wide. The first effect in England was, of course, a fall in the rate of exchange, but the surprising thing was the extent and rapidity of the fall. In five days the rate dropped to $3.43, whereas in 1919 it took nine months for the rate of exchange to fall to $3.50. Probably the explanation lay in the continued withdrawals of gold, for it must be remembered that the mere fact of England going off the gold standard compelled many countries which were on the gold exchange standard and had their currency funds in London to withdraw these at once before matters became worse. This, indeed, was one of the most regrettable features of our abandonment of the gold standard. These countries had adopted what is, after all, the best form of backing for their currencies, namely a claim on gold. Instead of keeping the gold themselves they let it lie in a place where it would be most convenient when wanted, and where they thought they were perfectly safe to get it, for the great point of London's position as the only free gold market was that creditors could always rely on getting gold there. That London would default on gold payments had simply never been dreamt of. In fact it meant that the Bank of England had failed—to meet its obligations *in gold*; and the resulting shock to all these countries was just the kind of thing that the man in the street in England entirely failed to realize. There had for some time been an agitation in England in favour of going off the gold standard, and the public in England seemed to be completely unaware of the fact that going off the gold standard meant, in effect, a declaration of bankruptcy.

But the movement of relative prices soon justified the fall in the exchange and carried it still farther. Prices of most commodities rose sharply and the Board of Trade Index Number of wholesale prices touched its highest point in November. The subsequent relapse, however, was nearly as sharp, and continued until June or July when many commodities touched new low levels, and some of them the lowest in history. Gold prices in other countries, however, gained practically nothing by the rise in September, and were quickly on the downward grade again till they also touched a new low level in June 1932.

The Stock Exchange reopened on September 23 with a small boom in industrial shares, but restrictions had to be imposed on dealing and these were not completely removed till February. Restrictions on new issues, however, continued though modified from time to time.

A remarkable feature of this period, and, indeed, of the whole period of the depression since 1929, was the stability of our banking system. Never at any time was there any run on the banks as in almost every other country, even France and America, and not a single British bank got into difficulties of any kind. The exception which proved the rule was one South American bank in London which had been handling the affairs of the great Chilean Nitrate Combine and had to receive assistance from the Bank of England.

The Bank Rate remained at 6 per cent. till February 18, 1932, but from then onwards it was steadily reduced till it reached 2 per cent. on July 6. As the result of continued withdrawals the Reserve fell heavily, and with the seasonal low point at the end of December 1931 it was reduced to 18·41 per cent.

What may be regarded as the first sign of recovery was on October 30, when the Bank of England found itself able to repay £20 millions of the £50 millions loan from France and

America. Of this, £15 millions was paid in gold, but on February 1, 1932, the balance of £30 millions was paid without drawing further on our gold stock. As to the Treasury's £80 millions credits it was announced in February that they had the money in hand and a substantial part was paid then, but as part of the credit in France was in the form of twelve months' bonds these could not be paid until the loan matured.

The fact of our being able to make these large payments was partly due to the extraordinary development which began in February 1932 in the recovery from private individuals of large quantities of old gold and sovereigns. In that month it was announced in the House of Commons that there was no official objection to the full exchange price being paid for gold, and as at the rate then current this meant nearly 30*s.* for a sovereign, there was an immediate rush to realize the premium, which extended to all kinds of old gold and jewellery. Up to 1933 the total amount recovered in this way was estimated at £15 millions in England alone. Very quickly the dealers in India realized the opportunity of a profit to be made in the same way, and from then onwards there was a steady stream of gold from India to London and Paris which resulted up to 1938 in a total export of nearly £250 millions. At the same time, it became evident that the changed conditions were having their effect in a marked increase in the world's production of new gold (see Table II).

Great hopes had been entertained that the effect of our going off the gold standard would be immediately to remedy the balance of trade, and there was at first some increase of exports. This, however, did not prevent the protectionists from carrying on their campaign. The general election was held in October 1931 and resulted in an overwhelming victory for the National party. On the score of the necessity of preventing forestalling of tariffs the Abnormal Importations Bill in November imposed emergency duties on many articles, and this was followed in February 1932 by a general tariff.

The figures of the balance of trade, both visible and invisible, are given in Table XVII. The results for 1931 were certainly bad enough with an estimated net *debit* balance of £70 millions, and subsequent years showed no improvement.

The first effect on other countries was that a number of them followed our example. Norway, Sweden, and Denmark did so at once, and in October they were followed by Rhodesia and Finland, while Canada also placed gold exports under licence, and in December Japan reimposed the embargo on gold exports which had only recently been withdrawn.

The next point was the effect on those countries whose currency was on a sterling basis, particularly India and Egypt, both of which decided to retain their connection with sterling, so that they also were off the gold standard. Australia had already been in the same position for some time, and New Zealand followed the example of Australia in 1933.

The most serious effect, of course, was on those countries which had sterling balances in London. The Bank of France, for example, had still fully £60 millions in London, which meant a loss to them of about one-third, and the French Government had to take this over as they had taken all the Bank of France's profits from the foreign exchanges after the stabilization in 1928. Belgium and Holland were in a similar position, though their losses of course were smaller. Private bankers all over the world had balances in England and they simply had to make the best of their loss. The movements of gold holdings are shown in Table III, which gives the monthly gold holdings of the central banks throughout the world. Germany, like England, lost gold heavily, but the most striking movement was the heavy flow of gold to Belgium, Holland, and Switzerland. This was, of course, the natural effect of the holders of money seeking safety in any country which was still on the gold standard. France also continued to accumulate more gold, though the increase at first was relatively not very large. Some of this came from London and a good deal from India, but mostly it came from the U.S.A. The main feature in France, however, was the very heavy increase of the note issue, largely the result of some bank failures. At the same time, a gold-hoarding movement developed in France, any one who could afford it buying a bar of gold, while smaller people bought gold coins, and, as few French gold coins were available, there was a marked demand for golden eagles—American $20 pieces.

Early in 1932 it became clear that the position in America was becoming serious. The first effect of England's going off the gold standard was a general rush to buy dollars, but before long this gave place to growing uneasiness as to the position in America, largely as the result of another flood of bank failures, the extent of which may be realized from the following figures:

	Number of Banks failed	*Deposits $ millions*	*Average $ 000's*
1930 . .	1,345	865	643
1931 . .	2,298	1,692	736
1932 . .	1,453	730	502

The heavy withdrawals of gold, mostly to France, were causing the authorities in America a great deal of uneasiness, but what was worse was the development of a movement in America to hoard currency, even paper dollars (see Table VIII). The result was that during the winter of 1931–32 the American authorities entered upon a series of measures based on the idea that America must put her own house in order, regardless of the rest of the world, by stopping the deflation which was supposed to be the cause of the depression. But as the authorities were apparently very much afraid of the name of inflation the alternative of 'reflation' was coined.

The tale of all these relief measures is long and complicated, but in view of what happened afterwards in America some attempt to outline the chief points is essential. As far back as 1927 the American Government had realized that something must be done for the farmers, and the first attempt was the McNary–Haugen Bill; this was intended to raise the prices of the chief crops in America which were dependent on an export balance, but nothing came of that Bill. In the presidential election of 1928, however, both parties again found themselves driven to make promises to the farmers, and in 1929 the Hoover administration set up the Federal Farm Relief Board to deal with cotton and wheat, which had just got into operation before the Wall Street crash in October of that year. The strange tale of the operations of that Board has been told by the writer elsewhere,[1] and all that can be said here is that with a revolving fund of $500 millions the Government found themselves embarked on a policy of sustaining prices by loans, the only effect of which was that they were left with enormous stocks of wheat and cotton. The next step was the Veterans' Bonus Bill, the effect of which was to convert into immediate cash payments the various annuities due for war services, and this, it was said, involved payments of about $700 millions. Next came the new Reconstruction Finance Corporation with total funds of $2,000 millions. This was used primarily to liquidate the position of the banks in America, and loans were also made to some of the railways, but it had very little effect on industry in general.

The next move from Washington was a great drive against hoarding, and to make this clear it is necessary to give some account of the American currency system. As will be seen from Table VIII there were no less than seven different kinds of paper dollars in America. The gold certificates were backed entirely by gold, the silver certificates entirely by silver, but the bulk of the issue was the Federal Reserve notes, which were backed to the extent of 40 per cent. by gold and the balance by commercial securities, bills, &c. Of the metallic currency in circulation, gold formed about a half.

To explain subsequent events it is necessary to state here that the banking system of the United States is of a rather inchoate character, without any real central bank. The Federal Reserve system established in 1913 a Federal Reserve Bank in each of twelve districts throughout the United States, the most important being, of course, New York and Chicago, but not one of them had anything like the position of the Bank of England, though the Federal Reserve Board to some extent controls and co-ordinates them all. But the greatest anomaly in the system was the existence alongside of the Federal Reserve banks and the National banks, which are more or less under the control of the Federal Reserve system, of a huge number of small banks scattered throughout all the states of the Union, each state having its own banking laws, and these were therefore described as state banks. Many of them are very small compared with our ideas, and it was among these small banks, especially in the country towns, that the mortality was greatest.

---

[1] *The Marketing of Cotton* (Pitmans, 1933), chap. viii.

The first attempt to introduce some reform of this system was actuated by the threatened difficulties which arose from the drain of gold to France. The Americans have a peculiar way of regarding their gold holdings. The Federal Reserve notes must have a backing of 40 per cent. gold, and for ordinary banking business the banks under the Federal Reserve system must hold 35 per cent. of their sight liabilities in gold. Whatever gold was held in excess of these requirements was known as their 'free' gold, and in 1932, as the result of the enormous increase of Federal Reserve notes and the withdrawals of gold by France, the amount of this free gold was dwindling rather seriously. But the difficulty was largely accentuated by the fact that, owing to the scarcity of commercial bills as the result of the depression, the Federal Reserve Banks had great difficulty in finding commercial bills for the 60 per cent. cover, and they were therefore forced to hold much more than 40 per cent. in gold. The result was that even in 1932 there was vague talk of America being driven off the gold standard.

It was primarily to meet this difficulty that the Glass–Steagall Bill was passed in February 1932 to reform the statutes of the Federal Reserve system. The main provision of this was that the Federal Reserve Banks could hold government bonds instead of commercial bills for the 60 per cent., and it was estimated that this would set free about $700 millions of gold, which would enable America to clear off the whole of the French balances. At the same time, the Bill made other provisions which were intended to facilitate the supplies of credit and increase the margin of free gold.

In the meantime, however, the world was again coming under the shadow of the problem of war debts and reparations. President Hoover had acted in June 1931 without consulting Congress, and it was taken for granted that they would resent it. When Hoover did meet Congress the explosion was even worse than had been expected, and finally the moratorium was only accepted with the addition of the following rider:

> 'It is hereby expressly declared to be against the policy of Congress that any of the indebtedness of foreign countries to the United States should be in any manner cancelled or reduced; and nothing in this joint resolution shall be construed as indicating a contrary policy, or as implying that favourable consideration will be given at any time to a change in the policy hereby declared.'

Thus the question of war debts and reparations had reached a complete impasse, Germany asserting the complete impossibility of her paying any more reparations, France proclaiming that if Germany would not pay her, she would not pay any one else, England reiterating from time to time the terms of the Balfour Note that we asked no more from our debtors than we had to pay to America, and America refusing to entertain any proposal for cancellation or reduction. It was under these conditions that the Lausanne Conference at last met in June 1932, and out of this hopeless position, to the surprise of the whole world, Mr. Ramsay MacDonald actually succeeded in getting an agreement which practically wiped out German reparations by a final but still conditional payment of £150 millions. But the acclamation with which this was received was quickly checked when it became known that behind the settlement lay a 'Gentlemen's Agreement' between France and England that the settlement was not to come into force unless they were able to make a consequential settlement on reasonable terms with America. At the same time Mr. MacDonald issued invitations for a World Economic Conference to be held forthwith to discuss all the other problems of the world, which America agreed to attend on condition that the discussions excluded war debts and tariffs!

In spite of these qualifications, however, Lausanne was hailed by the world as the beginning of the end of the depression, and the feeling of hope which it engendered was strengthened by the startling announcement that England proposed to convert £2,000 millions of war debt from a 5 per cent. basis to 3½ per cent. This was regarded as a great step forward, because it was taken to indicate a general movement for the reduction of the rate of interest, and it was quickly followed by other countries converting their state debts and then by private debtors of all kinds converting maturing obligations to a lower rate. To assist this Conversion operation the Bank Rate was reduced on July 6, 1932, to 2 per cent. (at which it has stood ever since), thus marking the inauguration of the new policy of 'Cheap Money' which it was hoped would end the long depression. The result was a new wave of optimism which sent prices of all commodities on the upward track again, though once more the rally was short-lived and the Index Number of wholesale prices fell again to a new low level in April 1933.

In the meantime the Budget of 1932 had set up the new Exchange Equalization Fund with a fund of £150 millions (plus a balance of some £25 millions which had remained over from the old Exchange Account or Dollar Reserve Fund, dating from the War). Its object was to smooth out the day-to-day fluctuations of the exchanges, but it was soon to develop much more important functions.

Nothing could be done about the American debt until after the presidential election in America in November, 1932, which resulted in Roosevelt's first sensational victory. As soon as that was over, however, the question was taken up again by France and ourselves but no argument would move America, and finally on 15th December we had to pay $95 millions, but at the last minute France refused to pay. The payment was made by the Bank of England transferring £19,362,831 of gold (about 4½ mlns. oz. fine) in its vaults 'earmarking' it for the Federal Reserve Bank in New York, who then paid over the equivalent in dollars to the U.S. Treasury. As a matter of fact shipments of the gold actually began, but the immediate effect of our payment was a quick recovery in the exchange, which had fallen to $3.14, and very soon money was flowing back into London again, with the result that the Bank was actually able to buy back the remainder of the £19 millions of gold. This was the beginning of a new series of purchases of gold by the Bank of England, which raised the Bank's gold holding from the low point of £120 millions in December to £190 millions in June 1933. This movement was the visible sign of a remarkable change in the attitude of the world to England's credit. Money continued to flow back to London in large quantities, and the Bank, moved presumably by the fear of being caught again as it had been in September 1931 with all this 'bad money', to use our own old market phrase, because it was liable to be withdrawn suddenly at any time, apparently decided that the only safe thing was to hold gold against it. But this was raising the Bank of England's gold holding to excessive figures, and there was, perhaps, the fear that if it were withdrawn again when the foreign owners wanted their money back the mere fact of publishing such a heavy reduction in the Bank's gold figure would cause trouble. It had been laid down from the first that the operations of the Exchange Equalization Fund must be kept absolutely secret, and it was possibly this that suggested to the authorities the idea that the E.E.F. should hold the gold in their own name apart from the Bank of England's gold, and for this purpose another £200 millions was added to the E.E.F. by the 1933 Budget.

But this, in effect, meant a complete revolution in the old system under which the Bank of England controlled the foreign movements of gold and the rates of exchange. Now, the whole of this business was practically taken out of their hands by the E.E.F. If there was a demand for sterling, say, from France, the E.E.F. provided the necessary funds in London against gold earmarked in Paris to be passed on to London when required. If, on the other hand, there was a demand for dollars the E.E.F. would supply the demand and ship the gold to New York. In effect, therefore, the E.E.F. had taken the place of what might have been called the foreign department of the Bank of England.

Much of this gold was coming from America, and this, as it turned out, was the beginning of a general feeling of alarm with regard to the situation there, which was to produce the most dramatic development of all—the banking crisis in the United States, which resulted in America going off the gold standard.

In December 1932 there had been a demand in Congress for publication of the loans of the Reconstruction Finance Corporation. Some one published the list unofficially, which forced the hands of the authorities, and the effect, as they had predicted, was an immediate fresh outburst of alarm as to the position of the banks that had been assisted, and the trouble spread with traditional rapidity into a general run on the banks. Withdrawals of currency for hoarding purposes mounted rapidly, and this time there was a marked preference for gold certificates or for actual gold, and there was also a considerable amount of earmarking of gold in New York for foreign account. On Saturday, March 4, things came to a head with the banks in New York and Chicago closing down, which of course involved the closing of the Stock Exchanges and the commodity markets, and the suspension of all dealings in foreign exchange.

On the very day of the crisis Roosevelt was inaugurated as President, and he at once declared a banking moratorium for the whole of the United States, which included a complete gold embargo both internal and external. Thus, technically, America was just as definitely off the gold standard as England was in April 1919, but the Treasury officials stoutly denied any such intention and the world seemed prepared to take their word for it, for the dollar kept very steady. The currency problem solved itself, for the immediate effect of Roosevelt's bold policy was to create a new feeling of confidence, and large amounts of currency, especially of gold under the threat of severe penalties, were returned to the banks. In the meantime Roosevelt also faced promptly the necessary balancing of the budget, and Congress immediately passed stringent economy measures, while at the same time the first step was taken towards the abandonment of Prohibition by legalizing light beer, which, it was estimated, would bring in a large revenue.

Thus it looked as if the crisis had passed. The drain of gold had been stopped and the total gold holdings of the country were still enormous, while the possible foreign claims against it were relatively small, being probably less than the amount of free gold in the country. There seemed, therefore, no reason why the embargo on gold exports should become permanent, nor why there should be any large measure of inflation, but before the middle of April there were signs of a new move. The 'lame duck' session of Congress, which had met between the presidential election and the inauguration of the new president, developed a positive mania for farm relief legislation and one proposal after another was introduced, but the Farm Relief Bill embodying some of them only passed through Congress two days before the expiry of Hoover's period of office, and was never signed by him. When the new Congress assembled a new Farm Relief Bill was introduced, embodying features of all the previous proposals, but in the later stages of the passage of this bill through Congress, one Senator suddenly proposed the addition of a section conferring upon the President extraordinary powers of inflation, which included: (1) the right of the Government to issue $3,000 millions of bonds to the banks and, if the banks would not take them up, to issue currency for that amount; (2) provisions for the rehabilitation of silver, *inter alia* by authorizing the acceptance of payment in silver to the extent of $200 millions from foreign debtors, this silver to be used as the backing of a further issue of silver certificates; (3) power to the President to reduce the gold value of the dollar to such an extent as he thought fit up to 50 per cent.

On April 19 it was announced that the gold embargo would be strictly enforced, and this time it was officially admitted that America had thereby ceased to be on the gold standard. The result was a dramatic fall in the rate of exchange, and this was the signal for a wave of inflationary optimism which carried commodity prices and the stock exchange to new high levels. Any doubt that might have remained as to whether America was still on the gold standard was finally removed when, on May 1, the American Government refused to meet its interest payments to foreign holders in gold or at the gold value, and this example was of course promptly followed by other American debtors, even where the contracts contained the special clause requiring payment in gold, which therefore became practically a dead letter. Germany immediately adopted a similar course.

The fiasco of the World Monetary and Economic Conference of June 1933 was so complete that it hardly deserves mention as a stage in history. From the first it became apparent that there was a deep cleavage of opinion on the question of monetary stabilization, which was the fundamental issue before the Conference. All the countries still on the gold standard wanted at least temporary stabilization, and a scheme to secure this was drawn up with the concurrence of the American representatives, only to be promptly turned down by the President. America, being now definitely committed to a policy of inflation, was determined to see how that would work out before considering any measure of stabilization. The result was a further depreciation of the dollar. Having thus failed to settle the major issue it was realized that discussion of other questions was futile and the Conference adjourned on July 27, with only one definite achievement to its credit—an agreement relating to the sales of silver by the Indian Government.

In June the half-yearly payments of war debts to America again fell due. This was one thing on which Congress had not given Roosevelt full powers, though the Farm Relief Bill authorized the American Treasury to accept silver up to $200 millions in payment of debts due by any foreign government to the United States, at a price not exceeding 50 cents per ounce. It was apparently under this clause that our Government finally decided to make a token payment of $10 millions in silver at the agreed rate, so that it is said the payment cost Britain only £1,620,000.[1] Italy also made a token payment, but France again defaulted entirely.

In America during the summer of 1933 interest centred in the development of Roosevelt's New Deal. The Agricultural Relief Act set up a new government organization known as the Agricultural Adjustment Administration (A.A.A.), the objects of which were to enable growers to hold for a fair price by granting them loans on their crops, to restrict production, and to raise agricultural prices to the level of industrial prices, for as the result of protection the discrepancy between the two was very marked. This, however, was only part of Roosevelt's policy that the purchasing power of American consumers should be maintained or improved, and he next proceeded to inaugurate a great scheme of industrial control under the title of the National Industrial Recovery Administration (N.R.A.)

[1] *The Economist*, June 17, 1933.

which included shorter hours and minimum wages, no juvenile labour, and, most contentious of all, the right of collective bargaining. As some compensation to the employers it modified the anti-trust legislation so as to allow them to enter into price agreements.

In August 1933 the United States entered on their new gold policy, which culminated in January 1934 in the devaluation of the dollar to 59·06 per cent. of its original gold content, making the price of gold $35.00 per oz. instead of $20.67. The result incidentally was a very sharp depreciation of the dollar rate of exchange, which at one time touched $5.56, so that in December 1933 we were able to make very cheaply a further token payment of ten million dollars against the American Debt, but that was the last.

Though America was thus once more on the gold standard it was not entirely 'effective', for the United States undertook to sell gold at the new price only to countries on the gold standard. Incidentally, out of the proceeds of devaluation America set up an Exchange Equalization Fund on the lines of our own with a capital fund of two thousand million dollars.

The Thomas Amendment to the Agricultural Relief Act in 1935, which included power to accept silver against the debts due to America, proved to be the beginning of a great drive in America for the rehabilitation of silver under which it was finally decided that the Government would purchase the whole of the U.S. silver stocks, which were supposed to be about 250 million ounces, at 50 cents per oz., and were also to buy silver abroad up to 25 per cent. of their total requirements for metallic cover against their paper currency. The principal effect of this was to raise the domestic price of silver in the United States, and therefore the world price, in 1935, to such a level that China and Mexico were driven off silver.

In 1935 the whole policy of the New Deal came under fire in the U.S. Supreme Court on the grounds of its alleged unconstitutionality. The Gold Clause rather unexpectedly survived the test, but the A.A.A. and the N.R.A. were rejected, and in 1936 the Government were busy trying to replace them by new measures such as the Soil Conservation Act and the Wagner Labour Relations Bill.

In 1936 the political clouds over Europe, which have been the nightmare of the world's financial affairs ever since, began with the German reoccupation of the Rhineland in March. In April the new French Government of the Left, the 'Front Populaire', came into power, and in September they finally decided on devaluation of the franc, the gold content of the franc being reduced from 65·5 milligrams to somewhere between 43 and 49, the exact point to be decided later when things had settled down. The result was that the sterling-franc exchange dropped from about 75 to 105 francs to £1. But the outstanding feature of this new arrangement was that it was made by agreement between France, America, and ourselves, under the so-called Tripartite Agreement, the main object of which was to prevent deliberate currency depreciation. To this, however, other nations were invited to adhere, the United States agreeing to allow exports of gold to any country that did so, but only through government agencies, i.e. to their Central Banks.

The rest of the gold bloc, mainly Belgium and Switzerland, followed France's example. Italy and Germany had, of course, long ceased to be on an effective gold standard because they were now working under a 'closed economy' with no free export of gold and the foreign exchanges regulated to the utmost limit. But Italy did go through the fiction of realigning the lira with sterling, which of course simply meant devaluation to about 60 per cent.

Thus September 1936 closed the period of five years during which one country after another went off the gold standard and only America had more or less returned to it. The world price of gold was now $35.00 per oz. and the market price in London was simply that figure converted into sterling at the current rate of exchange. The surprising thing was that, in spite of the fact that we were still off the gold standard, London had regained something very like its old position as the central bullion market of the world, but its method of operation was entirely changed by the setting up of the Exchange Equalization Fund, which had now taken over the entire control of gold movements and the foreign exchanges.

There remained to the Bank of England the control of what may be called the internal conditions of the London Money Market, involving the control of credit conditions in London, and the separation of these two departments appeared to many to be a good thing in itself. These were the people who, for example during the deflation period, maintained that the dear money policy penalized our internal credit system and lowered home prices for the sake of the foreign exchanges, and they maintained that the best justification of the new system was the fact that the Bank Rate had never moved from 2 per cent. since July 1932. In that period the authorities had been able to pursue without distraction from outside influences their policy of cheap money, which was now at last beginning to produce its expected effect in rising prices. This last claim, however, will require further consideration in the next chapter when we come to consider the movement of prices after 1936.

In the meantime it is necessary to explain another theory which had grown up through these years of the method by which the Bank's control of the Money Market, including the Other Banks, was working out. This was the theory known as 'Open Market Purchases'. According to this theory, when the Bank of England buys securities (and the same argument was applied to purchases of gold), their payments to the sellers of these securities come back to the Other Banks as cheques on the Bank of England and are paid into their account at the Bank of England, thus increasing their cash and forming the basis for larger advances, which in turn come back to the banks as increased deposits. Thus the pyramid of credit is increased by such purchases, which under the Quantity Theory of Money should tend to higher prices. An examination of the statistics of the Clearing Banks and of the Bank of England shows very little correlation between either the securities or the gold in the Bank of England and the Clearing Banks' cash or deposits. When the Bank's gold and securities are taken together, however, there is a fairly good correlation between that total and the Clearing Banks' cash, but the correlation with the Clearing Banks' deposits is not so good. After 1933, however, for reasons which will be discussed in the next chapter, these correlations were much less evident.

In the meantime, therefore, all that can be said is that, as will be seen from Diagram B, the fall in deposits during 1931 gave place to a new rise in 1932 which, with a break in 1934, continued right through to the end of 1936, and that this increase did coincide with a slow revival of wholesale prices from the low point in 1933. But the real rise of prices did not come till 1937 and therefore falls to be dealt with in the next chapter.

In pursuance of their policy of cheap money the Treasury had retained all through this period the control over new issues on the Stock Exchange which had been the legacy of the 1931 crisis, and this power was used from time to time, particularly to prevent any operations which would result in a substantial movement of funds to foreign countries, especially America. At the same time the Treasury, through the Bank of England, had established what amounted to a complete control of internal issues, especially by municipalities and other local authorities, not only as to the time of issue but as to the rates of interest offered. The prime motive of the control of foreign issues was originally to prevent any undue strain on sterling, but the control of internal issues had come to be recognized more and more as a means of enabling the Treasury to keep the London Money Market in a condition favourable to any new Treasury issues.

At the same time an important new factor was developing in the market in the very large holdings of gilt-edged securities by various government departments, such as the Savings Banks, the National Health and Unemployment Insurance Funds, and the various pension funds; in 1937 it was estimated that these funds amounted to about £800 millions[1] and that they were increasing at the rate of about £75 to £80 millions per annum. These funds are of course changed very frequently and, being entirely under the control of the Treasury as to the nature of their investments, the Government were frequently able to use them to take up government stocks which at the time were not in great demand on the market, and hold them until a more favourable opportunity arose for unloading them on the market. Thus the Treasury had themselves become the largest single holder in the market of government stocks and they were able at times to exert a definite influence on the values of gilt-edged securities, particularly when the Government were contemplating a new issue.

---

[1] *The Economist,* November 6, 1937, p. 268.

CHAPTER XVI

TOWARDS A NEW GOLD STANDARD?

The Tripartite Agreement.—The E.E.F. and the Issue Department.—Rearmament —Rise of prices.—The Gold Scare.—Further French devaluation.—A new depression from America.—Germany, Austria, and Czechoslovakia.—The War Scare.—Defence of sterling.—Confidence and credit.—A managed credit system.

It had been hoped that the Tripartite Agreement would inaugurate a new era of stability in the foreign exchanges which would be the forerunner of a more formal stabilization, but the new system was soon to be subjected to a series of very severe tests under which that hope became more distant. Prices in France of course quickly showed the effect of devaluation with a sharp rise, but the rise in America and in England was much slower.

In December the usual seasonal requirement of additional bank-notes was made the occasion for a rather peculiar move when the Treasury announced that the E.E.F. had transferred £65 millions of gold to the Issue Department of the Bank of England and that the Fiduciary Issue had simultaneously been reduced from £260 millions to £200 millions, thus giving the Bank an extra margin of £5 millions on the Note Gold. This transfer of gold from the E.E.F. to the Bank of England was of course nothing new; similar transfers on a smaller scale had been going on since 1933; but the rather spectacular way in which it was done drew attention to the fact that the Government regarded the whole of the gold in the Bank of England and the gold belonging to the E.E.F. as all one fund.

At the same time the United States authorities adopted a new policy of 'sterilizing' gold imports which was very much in line with the method of our own E.E.F. We paid for the gold by Treasury Bills which of course were taken up by the Money Market, so that in effect the market found the money to pay for the gold. In America, on the other hand, the custom had been for the Federal Reserve Banks to take over the gold direct. Under the impression that this might lead to the creation of excessive reserves in the banks and so have inflationary effects, it was now proposed that the U.S. Treasury should retain the gold in an 'Inactive Gold Fund' paying for it with Treasury Bills.

In the latter half of 1936 attention was drawn to the marked rise of our own bank-note circulation which was coming to be recognized as another aspect of the movement of foreign funds to London. In the summer months preceding the final break up of the Gold Bloc there had been a considerable demand in France for Bank of England notes for the sake of the expected gain on final devaluation, but after that was over the circulation, so far from falling off, continued to mark new high records every year till 1937. In 1938 the highest point was on October 5 during the War Scare, after which there were considerable withdrawals of foreign money from London in which no doubt the bank-notes shared.

The announcement in February 1937 that we were to spend £1,500 millions on rearmament during the next five years, of which £400 millions were to be raised by loan, turned the gradual recovery of prices into something like an incipient boom. That, however, did not entirely suit the book of the authorities in this country and still less so in America. There the rise of prices, especially on the Stock Exchange, was attracting so much 'hot money', as they call it, to America that they were becoming very uneasy. It was felt that the reflationary measures which they had been pressing since 1932, now known as 'pump-priming', had been too effective. The Second Veterans' Bonus Bill for example, which had been forced through Congress over the President's veto, had released an enormous amount of purchasing power throughout the country, and this was increased by the large payments for public works most of which were only disguised relief. At the same time the sharp rise in steel prices was threatening to check the recovery in many important industries. Roosevelt therefore decided to put the brake on, and following an announcement of his view that certain prices were going too high while others were still too low, various steps were taken to check inflation, e.g. the requirement of additional bank reserves, the raising of Stock Exchange margins, and the balancing of the Budget which involved cutting down of expenditure on relief and public works and the imposition of new taxes, especially the Capital Gains Tax and the Undistributed Profits Tax.

At home, matters were not improved by the 1937 Budget with the new National Defence Contribution, which was very unpopular in its first form and had to be amended, and the appearance of the first instalment of £100 millions of the Defence Loan in 2½ per cent. Stock issued at 99½, a large part of which had to be taken up by the Public Departments as described at the end of the previous chapter.

But the whole situation was radically changed and any necessity for putting the brake on was quickly reversed by the Gold Scare in April 1937. Attention had been drawn to the sudden appearance of heavy exports of gold from Russia, which of course were finding their way to America as the only free market for gold, and the very heavy statistics of gold production including Russia suddenly came into the limelight. An American professor visiting London apparently started the rumour that Washington might find it difficult to go on buying all the gold in the world at $35.00 per oz., but the mere hint of a possible reduction of the world price of gold produced an extraordinary reaction. People suddenly realized that a fall in the price of gold meant a fall in the prices of other commodities also, though it might mean no change in the *value* either of gold or commodities. If, for example, the U.S. price of gold were reduced from $35.00 to $30.00 per oz., that meant that only thirty dollars would be made out of an ounce of gold instead of thirty-five, i.e. each dollar would contain more gold, and as the dollar would thus be of greater intrinsic value it would command more commodities in exchange; in other words, the seller of a bale of cotton would get fewer dollars for his bale. The result was a sharp fall in prices of commodities which so scared the authorities both here and in America that they had immediately to take all kinds of steps to deny any intention of lowering the price of gold, and in order to restore confidence in England the E.E.F., which had been buying gold heavily at lower prices during the scare, had another £200 millions added to the fund at its disposal, raising the total to £575 millions in all.

At the same time the Government, for the first time, published figures of the total gold held by both the Bank and the E.E.F., but these figures related to the previous March 31 and it was announced that in future they would be published twice yearly at the end of June and December as at the end of March and September respectively. Incidentally, as the Bank of England was still valuing its gold at the old rate of £4. 5*s*. per fine ounce, and the E.E.F. had presumably paid varying prices but averaging more nearly £7 per oz., the new figures were given in ounces and averaged at £7 per oz. throughout. The following table gives the details up to the latest date available:

Date	*Bank of England 000 oz.*	*E.E.F. 000 oz.*	*Total*	
			000 oz.	*@ £7*
March 31, 1937	73,842	26,674	100,516	703,500
September 30, 1937	76,843	39,854	116,697	816,900
March 31, 1938	76,843	42,546	119,389	835,400
September 30, 1938	76,844	21,684	98,528	689,400
March 31, 1939	30,459	49,490	79,949	559,650

As the result of all these measures the gold scare passed off during the summer of 1937 but in October fresh trouble appeared, primarily in America. As the result of the end of 'pump-priming' the U.S. Budget had been about balanced, but this also involved considerably increased taxation which hit Wall Street very badly, and taken in conjunction with new legislation about stock exchange margins it produced in Wall Street something very like a revolt against the New Deal. The result was an exceedingly bitter campaign against the President, greatly accentuated by his attempt to get round the veto of the Supreme Court in regard to constitutionality by what was described as an attempt to pack the Supreme Court. This set in motion a sharp decline in the Stock Exchange which was reflected in the prices of most commodities. In response to this the Government promptly reversed practically all the measures they had adopted which might be regarded as deflationary. Stock exchange margins were reduced again, Federal Bank Reserve margins were cut down to the old figures, the gold de-sterilizing policy was reversed, and finally after a long struggle the Capital Gains Tax was amended in a way which at least partly satisfied the objections of Wall Street.

In June 1938, therefore, the stage was at last set for recovery, and the New York Stock Exchange set the pace with a rise of prices which was promptly reflected by a sharp upturn in all the various indices of business activity, to which so much attention is paid in America, and a recovery in commodity prices.

Through all this, conditions in England seemed to follow those of America on a rather reduced scale. After the gold scare London continued at times to receive considerable quantities of gold, but the rate of exchange was kept fairly steady round about $4.95 and it was not found necessary to take back the £65 millions of gold from the Issue Department. At Christmas, however, a temporary addition of £20 millions was made to the Fiduciary Issue to cover the increased currency requirements of the holiday season. In spite of the continuance of the cheap money policy the Stock Exchange suffered a considerable decline throughout the winter and commodity prices showed a similar tendency.

From the period of devaluation in September 1936 the new Left Government of France had all along had a difficult time, especially in regard to finance, and in April 1937 they took advantage of the gold scare to allow the franc to slide a little further to 110. Again, in June 1937, in the course of another political crisis in France, the optional limits of 43 to 49 milligrams which had been fixed in September 1936 were abrogated and the franc was allowed to slide to 129. In September again this figure was raised to 147 and in January 1938 to 154½. In May 1938, however, the new Daladier Government 'finally' fixed the rate at not more than 179, and in December this was recognized by writing up the value of the gold holding of the Bank of France to the basis of 170 francs to the £ (i.e. 27½ milligrams to the franc).

With the passing of the depression in America in June 1938 it seemed that the rest of the world was also getting over the recession and that things might be expected to move forward again, but at this stage the major political crisis between Germany and Italy on the one hand and the rest of Europe on the other took a turn for the worse. Italy's war in Abyssinia in 1935 and the undisguised intervention of Germany and Italy in the Spanish Civil War in 1936 were followed in March 1938 by Germany's forcible annexation of Austria. In May 1938 it looked for a time as if Germany meant to do the same with Czechoslovakia, but that crisis passed only to emerge again in September, when it led to the rape of Czechoslovakia under the Munich Agreement. For a few days the threat of actual war hung over all Europe and it happened to come at a time when financial conditions in America were peculiarly unfavourable to London. America had for some time been developing a substantial balance of exports for which England had to find remittances. At the same time as the result of the political crisis all Europe was rushing to transfer its funds from London to New York. It was then that the enormous gold holdings of the E.E.F. came into play and, as was known later, the E.E.F. lost nearly £150 millions between March and September, though part of this was due to repatriation of capital from London to France in May as the result of the final stabilization of the franc.

The war scare quickly passed, but not till the sterling dollar rate of exchange had dropped on September 28 to $4.60, against an average of not far short of $5.00 during the earlier part of 1938. But the shaken confidence of the Continent in London had not been fully restored, and throughout the winter of 1938–39 there were several occasions on which a mere breath of rumour of almost any kind seemed to suffice to drop the exchange again to nearly $4.60. One of the most curious of these was when the September gold figures were published at the end of December and confirmed the fact that the E.E.F. had lost £146 millions of gold between March and September. As this was the very purpose for which the E.E.F. gold had been accumulated, viz. to meet an outflow of foreign 'bad money', and there was still an enormous total of gold in the joint fund (nearly £700 millions—see Table on p. 230), the attack on sterling seemed entirely unwarranted. It was known, however, that a good deal more had been lost since September.

For the Christmas trade of 1938 a sum of £30 millions was again added to the Fiduciary Issue, but it was understood that this was to be only temporary. Early in January, however, the Treasury entered on a series of measures to protect sterling. In the first place they reimposed the embargo on foreign issues, which had been somewhat relaxed early in 1938, and also certain 'unofficial' embargoes on particular operations in connection with gold sales, including loans by the Banks against gold and forward operations in gold. On January 6, 1939, this was followed by the announcement that the E.E.F. was to take back from the Issue Department about £200 millions of gold, which was practically the whole of the gold they had transferred to the Issue Department from time to time since 1933. To compensate the Issue Department for the loss of this gold the Fiduciary Issue, instead of being put back from £230 millions to £200 millions was to be raised to £400 millions. As the Bank of England still continued their old practice of valuing their gold at the official figure of £4. 5*s*. per oz. while the E.E.F. valued its gold at current market prices (which in December had risen to 150*s*. 5*d*. per oz.) the transfer of £200 millions from the Bank meant an addition of about £350 millions to the E.E.F. This apparently brought to a head the necessity of getting rid of the anomalous differentiation of values, and on March 1, 1939, an Act was passed under which the Issue Department was in future to revalue its gold and all its other assets every Wednesday at current market rates. The first result of this was to raise the value of the £126 millions of gold still in the Bank to about £221 millions, which made it possible to reduce the Fiduciary Issue again to £300 millions. This of course released securities to the value of about £95 millions, and as the Bank Charter Acts provide that all the profits of the Note Issue go to the Treasury, this sum fell to be repaid by the Bank. The Act provided, however, that instead of this windfall going to the Treasury for general purposes it was to be handed over to the E E.F. as the nucleus of a reserve fund. All this of course amounted to nothing more than book-keeping changes, but the sentimental effect on world markets was to restore confidence in sterling, and the exchange settled down again about $4.68.

This juggling of gold between the E.E.F. and the Bank had important repercussions on the market. The beginning of the process was the withdrawal of the foreign money from London, where it had mostly gone to swell the deposits of the Other Banks. This incidentally explains the increase of the Clearing Banks' deposits during 1935 and 1936, with the peak in the last quarter of 1937. The reduction of the banks' deposits meant a reduction in some direction of their investments, and an examination of the details in Table XIII (*c*) shows how this was effected in the last quarter of 1938 and the early part of 1939, the principal change being a substantial reduction in Discounts, which of course means Treasury Bills. That, however, was only the obverse of what was happening elsewhere. The E.E.F. finances its holdings of gold by Treasury Bills which are held by the market, including the banks, and when the E.E.F. sells gold it uses the proceeds to retire its Treasury Bills, leaving the market short of them. When in January the E.E.F. took back £350 millions worth of gold from the Bank of England paying therefor only £200 millions of securities (again Treasury Bills), that meant (1) that the Bank of England now held more Treasury Bills, which it could either retain or release to the market in exchange for other longer dated securities, (2) that the E.E.F. now had more gold and, if it continued selling, the supply of Treasury Bills in the market would be still further reduced. As the Money Market is very largely dependent on Treasury Bills for the employment of its spare cash this created a distinct shortage of the necessary bills in the market, which was much commented upon.

This drew attention to a new convention in the control of the Clearing Banks' assets which was now being put forward, that in addition to the ten per cent. cash against deposits the whole of the banks' assets must be divided broadly into two classes, more and less liquid. The former included Cash & Call Money and Discounts; the latter Loans & Advances and Investments, and it was claimed that these two classes must show a steady relation of 30 : 70. The difficulty of getting Treasury Bills to the amount required, it was alleged, was causing the banks to reduce their investments in order to keep within this proportion.

In the meantime, however, as the result of the war scare, the cost of rearmament had been piling up and it had become clear that the 1937 limit of £1,500 millions would be far exceeded. In February 1939, therefore, the Chancellor of the Exchequer announced that the borrowing limit of £400 millions fixed in February 1937 would be raised to £800 millions. Up till that date only £197 millions of the original £400 millions had been used, and it was now announced that for the financial year 1939–40 another £350 millions would be raised by borrowing. It was not stated, however, whether the money would be raised on a capital loan or whether the borrowing would be financed by Treasury Bills, which are of course very much cheaper for the Government, but it was hoped that so far as the latter method was adopted this would relieve the shortage of Treasury Bills. In the meantime the high figure to be borrowed in 1939–40, leaving only about £250 millions for the remaining two years of the five years programme, made it clear that even the new limit of £800 millions was likely to be exceeded, unless there were some unexpectedly favourable development in the direction of a check on armaments. In the budget of 1939, however, the limit for that year was raised only to £380 millions.

It remains to consider whether the further rise of prices after 1936 was in any way the result of these complicated monetary conditions. The usual evidence of the Clearing Banks' deposits counts for virtually nothing this time because it is practically certain that the increase of the deposits during 1935 and 1936 was largely due to the influx of foreign money, for which the banks were still prepared to pay the usual rate of a half per cent., though it was said that at times some of them had been willing to pay even more in the competition to secure these foreign deposits. But it is very striking that in the first half of 1937, when the rise of prices really got going, the deposits showed a definite check and that once more when in the latter half of the year prices were checked, deposits increased again. The truth is that the rise of prices during the spring of 1937 was mainly due to rearmament, for this set going another rush of speculation in raw materials for armaments and in shares of armament companies which was very severely checked by the reaction in America during the autumn of 1937 already described.

This last depression in America, however, only provides another illustration of a possible alternative explanation of these successive waves of rising and falling prices which have been almost continuous since 1914. That particular depression of prices lasted just as long as the New York markets felt inclined to pursue it. When they felt that they had got as much out of Roosevelt as they could hope to get, in the form of the amendment of the Capital Gains Tax, their attitude changed well in advance of the improvement in the various indices of business activity in the United States which were made the excuse for the recovery on the Stock Exchange, and which as a matter of fact rapidly followed that recovery. The only really new factor in the position in America was a big drive for new building, both domestic and industrial.

This then was just another case of confidence leading to a recovery of prices from a depression which had been caused by the deliberate creation of the opposite state of mind; and, looking back over the whole history of prices since 1914, it rather suggests that the frequent changes of the trend of prices were more due to the state of mind of the business world, in respect of their confidence in the future or otherwise, than to any monetary conditions. There is, of course, really no opposition between these two because the Quantity Theory of Money is merely that the general level of prices depends on the quantity of 'money'. But money is largely credit nowadays, and the volume of credit depends entirely on confidence, for, after all, confidence *is* credit. Anything therefore that destroys confidence tends to diminish credit. Our financial history since 1914 has proved this over and over again. The deflation slump of 1920 was brought about by the deliberate restriction of credit applied by the Government with every possible form of advertisement. The decline of prices from 1929 after the Wall Street crash was the result of over-confidence leading to its inevitable anti-climax. The way in which we were driven off the gold standard in 1931 was the direct result of the policy of deliberately running down our own credit, adopted for political purposes. Again, it was a fortuitous 'breach of confidence', due to the publication of the R.F.C. loans to the American banks, which caused the run on the banks early in 1933 and drove America off the gold standard. The recovery of prices from 1933 onwards in this country was just as clearly the direct result of the deliberate creation of confidence in the new policy of cheap money, and it was just beginning to reach its full effect when the gold scare of April 1937 again destroyed confidence in the new high level of prosperity. In France the Government of the Left under Monsieur Blum was deliberately destroyed by its political opponents creating an atmosphere of lack of confidence which led to heavy exports of capital and forced the successive devaluations of the franc.

It will be obvious that this idea of credit cuts across the theory of the trade cycle, or rather it should perhaps be said that a new tendency has arisen which may supersede the older theories (or the new and hardly yet accepted theories) of the trade cycle with its automatic changes in financial and economic conditions which produce periods of optimism and depression marked by upward or downward swings of the general level of prices. It is obviously a new tendency because the attempt of the moneyed classes to use their control of the money machine to create difficulties for an opposite political party, whose proposals threaten their interests, could only arise when the control of the political machine passed to what are now generally called parties of the Left. But it is a very undesirable tendency which will add new bitterness to political controversy.

Does this possibility of the deliberate manipulation of confidence proving a major influence in the state of credit make any difference in our view of the Quantity Theory of Money? In its simplest form that theory is merely axiomatic, that the general level of prices depends on the relation between the amount of money in existence and the amount of money's work to be done. But 'money' nowadays consists mainly of credit. The pre-war system, under which the volume of credit was strictly related to the amount of gold available, has given place to a system under which the volume of credit is 'managed' by the authorities in many different ways. But the one factor which the authorities cannot control is the public reaction to the changing conditions of trade which is summed up in the word 'confidence'. If, then, the volume of credit ultimately depends on such a purely psychological factor as confidence, the situation is entirely different from the old days when the volume of credit depended on a physical fact—the amount of gold available. The latter was measurable and could be forecasted to a certain extent. The former can only be measured by its results. What then, it may be asked, is the good of a theory which is hardly capable of being applied statistically?

It would, however, be a mistake to go to the other extreme and assume that the quantity of gold has now no effect on the volume of credit. On the contrary, the outstanding fact of recent years is that gold is still very largely used for the quick adjustment of a temporary balance of indebtedness between one country and another, whether that indebtedness is due to trade, either in visible or invisible exports or imports, or to permanent debts, including reparations and war debts, or whether it is due to the temporary desire of the owners of liquid capital in various countries to shift it about from one place to another either for supposed security or for a speculative advantage. Gold, therefore, is still the principal means of liquidating international balances, and it has the great advantage that its ownership can be moved more quickly than that of any other form of wealth, especially now that the method of earmarking gold has been so highly developed, so that gold payments can, in effect, be made by cable. Thus gold is still the international 'money', and there is no indication of any other means of payment taking its place. As long as that remains true the amount of gold will continue to have very important effects on the volume of credit; and money in the sense of the Quantity Theory of Money must still be regarded as having some relation to gold.

Finally, we must answer the question implied in the title of this chapter. Are we getting any nearer to the stage at which a return to a gold standard of some kind would be possible? There can of course be no question of a return to the old automatic gold standard at the pre-war rate of £4. 5*s*. per oz. of fine gold. The new rate of $35.00 per oz. has come, let us hope, to stay, for every one now recognizes, especially after the experience of the gold scare in April 1937, that the idea of changing the price of gold whenever it happens to suit particular interests in one country or another is quite impossible. We have made the one great change at the cost of infinite dislocation, and now that things are settling down again to the new level any further change is out of the question.

But the whole question now is whether we *have* settled down to the new level. During the summer of 1938 it looked very like it. The sterling-dollar exchange had not moved much to one side or another of $5.00 for a long time, and there seemed ground to hope that the French would be able to maintain their new rate of 179 francs maximum. Under these conditions we were getting fairly within sight of a new system of stabilization of currencies. It was different from the old system because no one could demand from the Central Bank gold in exchange for his currency at the fixed mint price; but any one could go into the bullion market and buy gold at a price which was fairly well stabilized through the operations of the Exchange Equalization Funds in all the important countries.

But all this rather hopeful preparation for an ultimate return to stabilization was completely destroyed by the war scare of September 1938 which carried the rate down to $4.60, and still more by the recurrence of similar declines for much less serious reasons in subsequent months. To talk of stabilization with rates no more 'stable' than that was self-deception, and the question for the future is whether the conditions that upset stability during that period have passed again. The answer to that question is bound up with the political uncertainties which were the cause of the war scare and which have not yet been appreciably relieved. Our new policy of guarantees to some of the smaller countries in Europe which are threatened by Germany, backed in most cases by loans based more on political than financial motives, dates from Germany's final dismemberment of Czechoslovakia and Italy's seizure of Albania in March, 1939, and is reinforced by our treaties with Turkey and (let us still hope) Russia. But all this is only a desperate remedy for an almost hopeless position.

If however we do succeed in averting or indefinitely postponing another world war it can at least be said that we now know how to organize a managed system of currency and credit which would permit of a measure of stabilization, if the political conditions of the world, and particularly the trade relations between different countries, could once more be put on a basis of peace and co-operation instead of the present conditions of bitter political hostility and insane economic nationalism.

STATISTICAL APPENDIX

TABLE I. WORLD'S PRODUCTION OF GOLD AND SILVER FROM 1493

(In millions of £'s)

Average of the years	*Gold*		*Silver*		*Gold and silver. Total*	*Gold per cent. of Total*
	Annual average	*Total*	*Annual average*	*Total*		
1493–1520	0·8	22·7	0·6	17·1	39·8	57
1521–1544	1·0	24·0	1·1	27·0	51·0	47
1545–1560	1·2	18·9	3·8	61·6	80·5	24
1561–1580	1·0	19·1	3·6	72·8	91·9	21
1581–1600	1·0	20·6	4·9	98·8	119·4	17
1601–1620	1·2	23·8	4·8	96·4	120·2	20
1621–1640	1·2	23·2	3·9	78·3	101·5	23
1641–1660	1·2	24·5	3·5	70·3	94·8	26
1661–1680	1·3	25·8	3·1	62·8	88·6	29
1681–1700	1·5	30·0	3·3	63·6	93·6	32
1701–1720	1·8	35·8	3·3	65·0	100·8	36
1721–1740	2·7	53·2	4·0	79·8	133·0	40
1741–1760	3·4	68·7	5·0	100·7	169·4	41
1761–1780	2·9	57·8	6·2	124·0	181·8	32
1781–1800	2·5	49·6	8·1	162·7	212·3	23
1801–1810	2·5	24·8	8·0	80·0	104·8	24
1811–1820	1·6	16·0	4·9	48·6	64·6	25
1821–1830	2·0	19·8	4·1	41·3	61·1	32
1831–1840	2·8	28·3	5·3	52·8	81·1	35
1841–1850	7·6	76·4	6·9	68·7	145·1	53
1851–1855	27·8	139·1	8·0	40·1	179·2	75
1856–1860	28·1	140·7	8·2	41·2	181·9	75
1861–1865	25·8	129·1	10·0	49·8	178·9	72
1866–1870	27·2	136·0	12·0	59·9	195·9	70
1871–1875	24·3	121·3	17·2	86·2	207·5	58
1876–1880	24·1	120·3	19·1	95·5	215·8	56
1881–1885	21·6	107·9	21·4	106·8	214·7	50
1886–1890	23·3	116·7	23·9	119·6	236·3	49
			Million oz.		*Silver, million oz.*	
1891–1895	32·5	162·3	159	794	1931	196
1896–1900	53·0	266·1	167	834	1932	165
1901–1905	65·0	325·0	168	838	1933	169
1906–1910	87·0	435·0	197	987	1934	190
1911–1915	93·3	466·7	202	1,012	1935	221
1916–1920	80·6	402·8	185	924	1936	252
1921–1925	74·1	370·7	222	1,111	1937	273
1926–1930	83·9	419·7	255	1,274	1938	264

Layton, *Introduction to the Study of Prices*, Appendix B.

Soetbeer, *Materials for the Illustration and Criticism of the Currency Question* (Gold and Silver Commission, 1888. Appendix.

Shaw, *History of Currency*, p. 155, and *The Economist*, annually.

TABLE II. WORLD'S GOLD PRODUCTION BY COUNTRIES FROM 1929

(Union Corporation figures—000's of fine ounces)

British Empire	*1929*	*1930*	*1931*	*1932*	*1933*	*1934*	*1935*	*1936*	*1937*	*1938*
South Africa	10,412	10,716	10,878	11,559	11,014	10,480	10,774	11,336	11,735	12,161
Canada	1,928	2,102	2,694	3,044	2,949	2,972	3,285	3,748	4,096	4,680
Australia	427	467	595	714	830	887	915	1,179	1,381	1,570
S. Rhodesia	561	548	532	574	642	691	726	797	804	814
Gold Coast	208	241	262	279	306	326	359	428	559	668
India	364	329	330	330	336	322	328	333	332	322
New Guinea	36	27	44	75	158	185	184	221	217	220
New Zealand	120	123	130	166	162	160	165	165	168	150
Others	53	68	98	138	187	263	308	395	423	505
Total	14,109	14,621	15,563	16,879	16,584	16,286	17,044	18,602	19,715	21,090
U.S.S.R.	1,085	1,434	1,750	1,950	2,650	3,800	4,500	5,400	5,000	5,000
U.S.A.	2,057	2,100	2,214	2,219	2,277	2,742	3,163	3,760	4,112	4,244
Mexico	655	670	623	584	638	661	682	754	846	930
Japan	356	389	401	402	441	487	589	679	750	800
Phillipines	161	179	182	230	280	349	446	597	692	862
Korea	138	160	290	312	370	400	473	562	680	730
Colombia	48	159	194	248	298	344	329	389	442	521
Congo	173	196	215	255	283	337	376	402	430	450
Chile	11	17	21	38	147	238	266	249	316	290
Others	783	911	952	1,184	1,367	1,651	1,716	1,715	1,800	1,833
WORLD TOTAL	19,586	20,836	22,405	24,301	25,335	27,295	29,584	33,109	34,783	36,750
Non-Monetary Releases	6,000	5,500	6,200	13,700	9,400	9,200	6,000	3,600	1,900	1,500
World Stock	553,600	569,200	597,400	635,600	670,300	706,800	742,400	779,100	815,800	854,000
Central Banks	503,300	534,700	551,700	580,700	582,300	627,200	644,400	678,000	713,200	760,100
Difference[1]	50,300	34,500	45,700	54,900	88,000	79,600	97,000	101,100	102,600	93,900

---

[1] Western Hoards and Exchange Equalization Funds.

TABLE III. GOLD HOLDINGS OF VARIOUS COUNTRIES FROM 1913

(From the Federal Reserve Monthly Bulletin—In millions of dollars)

	1913	*1920*	*1922*	*1924*	*1926*	*1927*	*1928*	*1929*	*1930*	*1931*	*1932*	*1933*	*1934*[1]	*1935*	*1936*[2]	*1937*	*1938*
World's Total .	4,857	7,239	8,402	8,956	9,210	9,568	10,027	10,305	10,916	11,289	11,893	11,951	21,051	31,604	23,564	25,359	26,244
U.S.A. . .	1,290	2,451	3,506	4,090	4,083	3,977	3,746	3,900	4,225	4,051	4,045	4,033	8,238	10,125	11,258	12,760	14,512
France . .	679	686	708	710	711	954	1,253	1,633	2,100	2,699	3,254	3,021	5,445	4,395	2,995	2,564	2,435
	1,969	3,137	4,214	4,800	4,794	4,931	4,999	5,533	6,325	6,750	7,299	7,054	13,684	14,520	14,253	15,324	16,947
Percentage of World's Total .	40·5	43·3	50·2	53·6	52·1	51·5	49·9	53·7	57·9	59·8	61·4	59·0	65·0	67·2	60·5	60·4	64·6
Rest of World .	2,888	4,102	4,188	4,156	4,416	4,637	5,028	4,772	4,591	4,539	4,594	4,897	7,367	7,084	9,311	10,035	9,297
U.K. . .	165	754	743	748	729	737	748	710	718	588	583	929	1,584	1,648	2,584	2,689	2,690
Germany .	279	260	239	181	436	444	650	544	528	234	192	90	32	33	27	28	29
Spain . .	92	474	487	489	493	502	494	495	471	434	436	436	740	735	718	718	525
Italy . .	267	206	219	221	224	242	266	273	279	296	307	373	518	270	208	210	193
Belgium . .	48	51	52	53	86	100	126	163	191	354	361	382	590	611	632	597	581
Holland . .	61	256	234	203	166	161	175	180	171	357	415	370	573	438	490	930	995
Switzerland .	33	105	103	98	91	100	103	115	138	453	477	386	624	454	655	648	699
Russia . .	786	..	3	73	85	97	92	147	249	328	368	416	744	839	..	..	..
Argentine .	256	474	473	444	451	529	607	434	412	253	249	239	403	444	501	469	431
Australia .	22	122	127	130	110	106	109	90	75	52	42	3	6	6	4	3	3
Brazil . .	90	33	46	54	56	101	149	150	11	..	..	..	8	17	25	32	32
Canada . .	117	113	147	151	158	152	114	78	110	78	84	77	134	189	188	184	192
India . .	124	116	118	109	109	119	124	128	128	162	162	162	275	275	275	274	274
Japan . .	65	556	606	586	562	542	541	542	412	234	212	212	394	425	463	261	164

---

[1] At $35 per oz. against $20.67 formerly.

[2] Excluding Russia.

TABLE IV. AVERAGE PRICE OF SILVER FROM 1870

(Pence per oz. in London)

1870	$60\frac{1}{2}$	1900	$28\frac{1}{4}$	1930	$17\frac{11}{16}$
1	$60\frac{9}{16}$	1	$27\frac{3}{16}$	1	$14\frac{19}{32}$
2	$60\frac{1}{4}$	2	$24\frac{1}{8}$	2	$17\frac{27}{32}$
3	$59\frac{1}{4}$	3	$24\frac{3}{4}$	3	$18\frac{5}{32}$
4	$58\frac{5}{16}$	4	$26\frac{3}{8}$	4	$21\frac{7}{32}$
5	$56\frac{13}{16}$	5	$27\frac{3}{16}$	5	29
6	53	6	$30\frac{7}{8}$	6	$20\frac{1}{16}$
7	$54\frac{3}{4}$	7	$30\frac{3}{16}$	7	$20\frac{1}{16}$
8	$52\frac{9}{16}$	8	$24\frac{3}{8}$	8	$19\frac{17}{32}$
9	$51\frac{3}{16}$	9	$23\frac{11}{16}$		
1880	$52\frac{1}{4}$	1910	$24\frac{11}{16}$		
1	$51\frac{3}{4}$	1	$24\frac{9}{16}$		
2	$51\frac{13}{16}$	2	$28\frac{1}{16}$		
3	$50\frac{9}{16}$	3	$27\frac{9}{16}$		
4	$50\frac{11}{16}$	4	$25\frac{5}{16}$		
5	$48\frac{5}{8}$	5	$23\frac{11}{16}$		
6	$45\frac{3}{8}$	6	$31\frac{5}{16}$		
7	$44\frac{5}{8}$	7	$40\frac{7}{8}$		
8	$42\frac{7}{8}$	8	$47\frac{9}{16}$		
9	$42\frac{11}{16}$	9	$57\frac{1}{16}$		
1890	$47\frac{3}{4}$	1920	$61\frac{9}{16}$		
1	$45\frac{1}{16}$	1	$36\frac{7}{8}$		
2	$39\frac{13}{16}$	2	$34\frac{7}{16}$		
3	$35\frac{5}{8}$	3	$31\frac{15}{16}$		
4	29	4	34		
5	$29\frac{7}{8}$	5	$32\frac{1}{8}$		
6	$30\frac{3}{4}$	6	$28\frac{11}{16}$		
7	$27\frac{9}{16}$	7	$26\frac{1}{32}$		
8	$26\frac{15}{16}$	8	$26\frac{3}{4}$		
9	$27\frac{7}{16}$	9	$24\frac{7}{16}$		

The lowest price before the War was $21\frac{11}{16}$*d.* on Nov. 27, 1902. On Feb. 11, 1920, it was $89\frac{1}{2}$*d.* On Feb. 9, 1931, it was 12*d.*

TABLE V. INDEX NUMBERS OF PRICES FROM 1782

The following continuous Index Number is derived from three sources: (1) Jevons's Index Number from 1782 to 1860; (2) Sauerbeck's from 1860 to 1870; and (3) the Board of Trade Index Number from 1871 to date. The first two have been recalculated to fit into the third, which is based on the year 1900 as 100.

See Layton's Appendix A and references there given.

Year	*No.*	*Year*	*No.*	*Year*	*No.*	*Year*	*No.*
1782	168	1820	172	1860	132	1900	100·0
3	168	1	157	1	131	1	96·7
4	156	2	147	2	135	2	96·4
5	151	3	148	3	137	3	96·9
6	143	4	147	4	140	4	98·2
7	146	5	172	5	135	5	97·6
8	146	6	150	6	136	6	100·8
9	143	7	150	7	133	7	106·0
1790	146	8	135	8	132	8	103·0
1	149	9	132	9	131	9	104·1
2	156	1830	135	1870	128	1910	108·8
3	166	1	137	1	135 6	1	109·4
4	165	2	130	2	145·2	2	114·9
5	196	3	125	3	151·9	3	116·5
6	220	4	130	4	146·9	4	117·2[1]
7	185	5	133	5	140·4	5	143·9
8	198	6	143	6	137·1	6	186·5
9	218	7	140	7	140·4	7	243·0
1800	235	8	140	8	131·1	8	268·1
1	233	9	153	9	125·0	9	296·5
2	183	1840	145	1880	129·0	1920	358·0
3	208	1	142	1	126·6	1	229·7
4	198	2	125	2	127·7	2	185·0
5	220	3	118	3	125·9	3	185·1
6	217	4	115	4	114·1	4	193·6
7	215	5	123	5	107·0	5	185·4
8	242	6	123	6	101·0	6	172·5
9	262	7	130	7	98·8	7	165·0
1810	237	8	113	8	101·8	8	163·4
1	227	9	107	9	103·4	9	159·0
2	202	1850	107	1890	103·3	1930	139·2
3	192	1	110	1	106·9	1	122·2
4	190	2	108	2	101·1	2	119·2
5	182	3	123	3	99·4	3	119·3
6	152	4	138	4	93·5	4	122·6
7	195	5	133	5	90·7	5	123·9
8	220	6	137	6	88·2	6	131·4
9	187	7	142	7	90·1	7	151·3
		8	127	8	93·2	8	141·1
		9	128	9	92·2		

---

[1] 1914, Jan.–July, 113·6; Aug.–Dec., 122·6.

TABLE VI. WHOLESALE AND RETAIL PRICES FROM 1914

1914–1919. *Economist*, Wholesale and Ministry of Labour Cost of Living (Percentages on July 1914)

	1914		*1915*		*1916*		*1917*	
	Whole-sale	*Retail*	*Whole-sale*	*Retail*	*Whole-sale*	*Retail*	*Whole-sale*	*Retail*
Jan.	..	.	117	115	150	135	193	165–70
Feb.	..	.	122	115–20	156	135	198	170
Mar.	..	..	129	115–20	157	135–40	207	170–5
Apr.	..	.	130	120	163	135–40	210	175
May	..	..	130	125	168	140–5	211	175–80
June	..	..	127	125	164	145	220	180
July	..	..	128	125	164	145–50	218	180
Aug.	105	under 110	128	125	170	145–50	221	180–5
Sept.	108	,,	130	130	172	150	220	175–80
Oct.	107	,,	131	130–5	179	150–5	222	185
Nov.	108	110	136	135	186	160	225	185
Dec.	109	110–15	142	135	191	165	228	185–90

	1918		*1919*		*1920**		*1921*	
Jan.	226	190	228	220	296·6	230	245·9	251
Feb.	227	190	226	215	310·3	230	225·2	241
Mar.	229	190–5	223	210	319·0	232	210·8	233
Apr	232	195–200	225	205	325·2	241	204·8	228
May	235	200	233	205	325·5	250	201·7	219
June	238	200–5	241	205–10	322·4	252	197·7	219
July	239	210	251	215	316·9	255	194·1	222
Aug	244	210	254	215	313·1	261	190·0	220
Sept.	243	215–20	257	220	311·4	264	187·0	210
Oct.	242	220–5	265	225	302·3	276	180·7	203
Nov.	242	220	272	225	286·9	269	172·8	199
Dec.	238	220	287	225	263·8	265	167·9	192

	1922		*1923*		*1924*		*1925*	
Jan	164·0	188	157·0	177	165·4	179	171·0	179
Feb.	161·8	186	157·5	176	167·0	178	168·7	179
Mar.	160·0	182	160·3	174	165·4	173	166·0	175
Apr.	160·3	181	162·0	170	164·7	171	161·9	173
May	160·6	180	159·8	169	163·7	169	158·6	172
June	159·9	184	159·3	169	162·6	170	157·2	173
July	160·3	181	156·5	171	162·6	171	156·9	173
Aug.	156·3	179	154·5	173	165·2	172	156·2	174
Sept.	154·3	178	157·8	175	166·9	176	155·1	176
Oct.	155·2	180	158·1	175	170·0	180	153·9	176
Nov.	157·6	180	160·8	177	169·8	181	152·7	177
Dec.	155·8	178	163·4	177	170·1	180	152·1	175

* From 1920 the Wholesale Prices are those of the Board of Trade, 1913 = 100

TABLE VI (cont.)

Board of Trade Wholesale, 1913 = 100

	1926		*1927*		*1928*		*1929*	
	Wholesale	*Retail*	*Wholesale*	*Retail*	*Wholesale*	*Retail*	*Wholesale*	*Retail*
Jan.	150·1	173	143·8	172	141·3	166	138·3	165
Feb.	147·6	172	142·6	171	140·1	164	138·4	166
Mar.	144·1	168	140·8	165	140·6	164	140·3	162
Apr.	143·6	167	139·9	164	143·1	164	138·6	161
May	144·9	168	141·4	163	143·6	165	135·8	160
June	146·9	170	142·1	166	142·6	165	135·6	161
July	149·1	170	141·4	164	141·1	165	137·4	163
Aug.	149·8	172	141·3	165	139·3	165	136·0	164
Sept.	150·9	174	142·6	167	137·6	166	135·8	165
Oct.	152·1	179	141·8	169	138·1	167	136·1	167
Nov.	152·4	179	141·1	169	137·9	168	134·0	167
Dec.	146·1	175	140·4	168	138·1	167	132·5	166

	1930		*1931*		*1932*		*1933*	
Jan.	131·0	164	106·9	152	105·8	147	100·3	141
Feb.	127·8	161	106·2	150	105·3	146	98·9	139
Mar.	124·5	157	105·9	147	104·6	144	97·6	137
Apr.	123·7	155	105·7	147	102·4	143	97·2	136
May	122·0	154	104·4	145	100·7	142	99·2	136
June	120·7	155	103·2	147	98·1	143	101·7	138
July	119·2	157	102·2	145	97·7	141	102·3	139
Aug.	117·8	157	99·5	145	99·5	141	102·5	141
Sept.	115·5	156	99·2	145	102·1	143	103·0	141
Oct.	113·0	157	104·4	146	101·1	143	102·6	143
Nov.	112·0	155	106·4	148	101·1	143	102·8	143
Dec.	108·9	153	105·8	147	101·0	142	102·8	142

	1934		*1935*		*1936*		*1937*	
Jan.	104·6	141	88·3	142	91·8	147	102·9	151
Feb.	105·3	140	88·0	141	91·7	146	103·9	151
Mar.	103·8	139	86·9	139	91·7	144	107·3	151
Apr.	102·4	137	87·5	139	91·9	144	108·9	152
May	102·4	138	88·2	140	91·9	144	110·7	152
June	103·6	141	88·4	143	92·6	146	110·6	155
July	103·4	142	88·0	143	93·6	146	111·5	155
Aug.	105·5	143	88·4	143	95·2	147	111·4	155
Sept.	105·2	143	89·6	145	96·1	148	111·2	158
Oct.	104·1	144	91·1	147	97·6	151	110·6	160
Nov.	104·1	144	91·2	147	98·3	151	108·5	160
Dec.	104·4	143	91·4	147	100·8	151	107·6	159

Board of Trade (Wholesale) New Series, 1930 = 100

	1938		*1939*	
Jan.	107·7	157	97·2	155
Feb.	105·8	156	96·8	153
Mar.	104·1	154	96·6	153
Apr.	103·1	156	97·2	153
May	102·0	155	97·8	153
June	100·7	159	98·1	156
July	100·6	156		
Aug.	99·5	156		
Sept.	98·4	155		
Oct.	99·1	156		
Nov.	98·4	156		
Dec.	98·3	155		

TABLE VII. U.K. CURRENCY IN CIRCULATION

BANK OF ENGLAND NOTES AND CURRENCY NOTES, 1914–28

Quarter ending	Bank of England Notes	Currency Notes	Total[1]
	£'s millions		
1914 Mar.	28·5	..	28·6
June	28·9	.	29·0
Sept.	33·6	24·9	59·9
Dec.	35·4	33·7	69·3
1915 Mar.	34·5	37·0	71·7
June	34·1	43·9	78·1
Sept.	32·8	55·2	88·2
Dec.	33·6	88·6	122·3
1916 Mar.	33·5	101·1	134·7
June	34·7	117·0	151·9
Sept.	36·1	128·3	164·5
Dec.	37·5	138·7	176·3
1917 Mar.	38·8	144·9	183·9
June	38·7	156·0	194·9
Sept.	40·3	171·3	211·7
Dec.	42·9	192·7	235·7
1918 Mar.	46·5	216·7	263·3
June	50·2	242·3	292·7
Sept.	57·2	265·9	323·3
Dec.	65·8	298·6	364·6
1919 Mar.	70·9	316·9	387·9
June	77·2	345·0	422·4
Sept.	80·0	336·0	416·2
Dec.	84·4	342·6	427·2
1920 Mar.	90·7	330·8	421·6
June	103·1	346·8	450·0
Sept.	106·9	354·3	461·4
Dec.	110·5	353·6	464·2
1921 Mar.	109·6	343·2	452·8
June	109·1	334·5	443·6
1921 Sept.	107·4	322·1	429·5
Dec.	105·3	315·4	420·8
1922 Mar.	103·3	304·3	407·5
June	102·5	300·6	403·9
Sept	102·7	295·6	398·4
Dec.	101·7	290·9	392·6
1923 Mar.	100·8	283·0	383·8
June	101·3	286·9	388·2
Sept.	102·8	288·0	390·7
Dec.	102·7	285·2	387·8
1924 Mar.	103·2	281·4	384·6
June	103·1	289·6	392·7
Sept.	103·5	291·7	395·2
Dec.	101·1	289·6	390·7
1925 Mar.	97·8	284·6	382·3
June	93·7	293·1	386·8
Sept.	88·7	297·2	386·0
Dec.	86·8	293·3	380·2
1926 Mar.	85·4	288·2	373·6
June	84·7	297·5	382·2
Sept.	84·7	291·9	376·6
Dec.	83·1	289·9	373·0
1927 Mar.	81·1	284·6	365·7
June	80·7	297·6	378·2
Sept.	80·9	297·1	378·0
Dec.	80·3	296·4	376·7
1928 Mar.	78·9	290·1	369·0
June	79·2	295·0	374·1
Sept.	79·4	296·8	376·2
21 Nov.	77·6	292·3	369·9

[1] Including issues of Country Banks.

(*b*) BANK NOTES AND COIN. NET CIRCULATION FROM 1921

Annual averages	Notes			Coin	Deductions			Estimated circulation
	England	Scotland	Ireland		Bank of England Reserve	Clearing Banks	Scotch and Irish Banks	
1921	454·3	27·0	20·5	71	19·5	110·7	42·3	401
1922	422·3	24·0	18·0	68	23·7	107·5	36·3	365
1923	408·8	22·9	17·1	65	23·0	103·8	33·9	353
1924	411·6	22·3	16·5	65	22·7	103·8	32·7	356
1925	410·7	21·7	15·8	66	28·7	103·7	31·4	350
1926	403·9	20·9	15·0	68	29·0	103·1	29·9	346
1927	407·5	20·9	14·7	69	34·3	105·1	29·3	343
1928	419·8	21·2	14·8	68	48·7	104·5	29·1	342
1929	408·1	21·3	16·9	69	45·4	104·4	24·7	341
1930	416·3	21·4	17·4	69	57·3	103·6	24·2	339
1931	407·3	21·0	16·6	69	52·3	95·9	23·4	342
1932	406·6	21·0	16·2	67	46·7	91·7	23·3	349
1933	441·6	21·0	16·8	67	70·2	97·7	23·4	355
1934	452·7	21·2	16·8	68	73·5	99·6	23·6	362
1935	454·9	21·7	17·5	70	59·6	103·1	24·4	377
1936	485·5	22·3	18·5	71	53·7	109·3	25·4	409
1937	525·2	23·1	19·5	75	45·5	114·2	26·4	457
1938	530·7	23·5	20·3	78	44·9	117·3	27·1	463

Changes in Fiduciary Issue (£'s millions)

1928 Nov. 11	260
1931 Aug. 5	275
1933 Apr. 5	260
1936 Dec. 16	200
1937 Nov. 17	220
1938 Jan. 19	200
1938 Dec. 7	230
1939 Jan. 11	400
Mar. 1	300

TABLE VIII. U.S. MONEY IN CIRCULATION from 1928

(From the Federal Reserve Monthly Bulletin)

(In millions of $'s)

End of December	*1928*	*1929*	*1930*	*1931*	*1932*	*1933*	*1934*	*1935*	*1936*	*1937*	*1938*
Paper:											
Gold Certificates .	991	880	1,118	877	601	213	130	109	95	83	75
Fed. Res. Notes .	1,808	1,862	1,641	2,603	2,716	3,044	3,176	3,667	4,233	4,237	4,405
Treasury Paper:											
Silver Certificates	410	417	404	389	371	405	592	828	1,057	1,137	1,339
Treasury Notes 1890	1	1	1	1	1	1	1	1	1	1	1
U.S. Notes . .	294	265	296	288	294	285	265	275	289	283	257
Fed. Res. Bank Notes . .	4	3	3	3	3	208	101	66	44	33	28
Nat. Bank Notes .	616	597	623	656	820	919	820	458	307	239	201
	4,124	4,025	4,086	4,817	4,808	5,075	5,085	5,404	6,026	6,013	6,306
Coin:											
Gold . . .	395	384	368	409	468	311	..	..	..	..	..
Silver dollars .	46	42	37	33	29	29	32	34	38	40	42
,, subsidiary .	291	294	281	271	258	271	294	312	337	350	357
Minor Coin . .	116	119	119	117	113	117	125	131	142	148	151
	848	839	805	830	868	728	451	477	517	538	550
	4,972	4,864	4,891	5,647	5,676	5,804	5,536	5,882	6,543	6,550	6,856

TABLE IX. LONDON BANKERS' CLEARING HOUSE

(*a*) Annual from 1868 (£'s millions)

Year	*Total*	*Per cent. on 1868*	*Daily average*	*Town*	*Metro-politan*	*Country*
1868	3,425	..	11·0	*Per cent. of Total*		
1878	4,992	146	16·3			
1888	6,942	203	22·6			
1898	8,097	237	26·3			
1908	12,120	354	39·4	85·8	5·3	8·7
1909	13,525	394	44·1	86·8	5·0	8·0
1910	14,659	427	47·9	86·6	5·2	8·1
1	14,614	426	48·1	86·1	5·4	8·3
2	15,962	466	51·8	86·5	5·2	8·1
3	16,436	479	53·5	86·3	5·2	8·4
4	14,665	428	48·2	84·7	5·8	9·3
5	13,408	391	43·7	81·3	6·9	11·6
6	15,275	445	50·1	80·7	7·0	12·2
7	19,121	558	62·9	82·1	6·1	11·7
8	21,198	618	69·7	80·3	6·7	12·9
9	28,415	829	94·1	81·6	6·3	11·9
1920	39,019	1,139	127·5	84·1	5·3	10·4
1	34,931	1,019	113·8	86·6	4·7	8·5
2	37,161	1,084	121·8	88·2	4·2	7·5
3	36,628	1,069	119·3	88·1	4·2	7·6
4	39,533	1,154	128·4	88·6	4·0	7·3
5	40,437	1,181	131·7	88·5	4·1	7·3
6	39,825	1,163	129·7	88·7	4·1	7·0
7	41,551	1,213	135·3	88·6	4·2	7·1
8	44,205	1,291	144·0	88·9	4·1	6·8
9	44,897	1,311	146·2	88·9	4·1	6·8
1930	43,558	1,272	141·9	89·0	4·1	6·8
1	36,236	1,058	118·0	87·8	4·6	7·5
2	32,112	938	104·3	86·7	5·0	8·3
3	32,138	938	105·0	86·2	5·1	8·6
4	35,484	1,036	115·6	86·6	4·9	9·7
5	37,560	1,097	122·7	86·3	5·0	8·5
6	40,617	1,186	131·9	86·2	5·0	8·7
7	42,686	1,246	139·5	86·0	5·0	8·9
8	39,610	1,156	129·0	85·4	5·2	9·2

Abstract of Records to Date

	£
Record day, Monday, June 30, 1930 . . .	282,157,000
Record week, week ended July 2, 1930 . . .	1,121,133,000
Record month, January 1929	4,274,313,000
Record year, 1929	44,896,677,000

TABLE IX. (*b*) QUARTERLY FROM 1925 (£'s millions)

	1925	*1926*	*1927*	*1928*	*1929*	*1930*	*1931*	*1932*
Total	40,437	39,825	41,551	44,205	44,897	43,558	36,236	32,112
1st Quarter	10,540	10,119	10,430	11,092	11,559	11,539	10,245	7,601
2nd „	9,938	9,773	10,510	11,296	10,752	10,979	9,840	8,031
3rd „	9,534	9,656	9,850	10,555	11,154	10,684	8,991	8,275
4th „	10,425	10,277	10,760	11,262	11,431	10,357	7,159	8,205
Town	35,801	35,346	36,820	39,311	39,936	38,783	31,816	27,834
1st Quarter	9,367	8,949	9,246	9,857	10,316	10,292	9,079	6,493
2nd „	8,789	8,689	9,331	10,080	9,514	9,782	8,745	6,970
3rd „	8,402	8,589	8,701	9,371	9,941	9,529	7,932	7,256
4th „	9,243	9,119	9,541	10,003	10,165	9,180	6,060	7,115
Metropolitan	1,678	1,661	1,758	1,854	1,882	1,812	1,668	1,610
1st Quarter	419	428	442	466	479	477	449	420
2nd „	415	402	437	459	470	455	417	395
3rd „	412	399	422	447	456	434	395	380
4th „	432	432	456	482	476	447	406	415
Country	2,958	2,818	2,973	3,039	3,079	2,964	2,752	2,668
1st Quarter	753	741	742	770	764	771	717	689
2nd „	733	683	742	757	769	742	677	665
3rd „	720	668	726	736	756	720	664	638
4th „	751	726	763	776	790	730	694	675
Provincial	1,790	1,628	1,710	1,673	1,599	1,348	1,200	1,238
1st Quarter	483	454	433	448	427	385	319	318
2nd „	437	384	409	414	387	333	287	298
3rd „	422	380	419	391	386	311	285	312
4th „	448	410	449	420	399	319	308	311

	1933	*1934*	*1935*	*1936*	*1937*	*1938*	*1939*	
Total	32,138	35,484	37,560	40,617	42,686	39,610		
1st Quarter	8,204	9,828	9,550	9,781	11,234	10,197	9,132	
2nd „	7,433	8,302	9,304	9,584	10,802	9,560	8,638	
3rd „	8,030	7,999	9,078	9,959	10,257	9,895		
4th „	8,471	9,355	9,628	11,293	10,394	9,958		
Town	27,714	30,740	32,444	35,039	36,719	33,862		
1st Quarter	7,092	8,619	8,284	8,385	9,734	8,677	7,701	
2nd „	6,361	7,131	8,062	8,243	9,307	8,157	7,216	
3rd „	6,938	6,866	7,813	8,598	8,798	8,522		
4th „	7,323	8,124	8,285	9,813	8,879	8,506		
Metropolitan	1,657	1,760	1,887	2,040	2,162	2,076		
1st Quarter	423	450	474	516	552	553	514	
2nd „	401	434	459	491	543	505	503	
3rd „	408	417	462	492	523	493		
4th „	426	458	492	540	543	525		
Country	2,766	2,985	3,229	3,538	3,805	3,673		
1st Quarter	689	760	791	881	947	968	917	
2nd „	671	737	783	850	951	898	918	
3rd „	684	715	803	868	936	880		
4th „	722	773	851	939	971	927		
Provincial	1,243	1,295	1,283	1,394	1,472	1,258		
1st Quarter	318	346	341	354	391	346	307	
2nd „	295	309	298	319	367	302	332	
3rd „	310	301	313	338	353	295		
4th „	321	339	330	383	361	316		

TABLE X. BANKING STATISTICS OF

1. DEPOSITS

(From *The Economist* Banking

	1900	*1913*	*1918*	*1919*	*1920*	*1921*	*1922*	*1923*	*1924*
BANK OF ENGLAND . .	44	71	173	200	190	123	133	132	174
JOINT STOCK BANKS									
England and Wales . .	587	809	1,583	1,874	1,962	1,975	1,834	1,822	1,814
Scotland	107	126	222	260	279	291	268	247	243
Ireland	49	71	132	166	200	213	210	201	198
PRIVATE BANKS . . .	40	27	51	56	51	48	51	33	29
Totals . . .	827	1,104	2,161	2,556	2,682	2,650	2,496	2,435	2,458

2. BANK NOTES IN CIRCULATION.

	1900	*1913*	*1918*	*1919*	*1920*	*1921*	*1922*	*1923*	*1924*
BANK OF ENGLAND .	30	30	70	91	133	127	125	128	128
JOINT STOCK BANKS:[1] . .									
Scotland	8	8	25	28	29	25	23	22	22
Ireland	7	8	31	29	25	19	17	17	17
	45	46	126	148	187	171	165	167	167

3. BANK RATE

	1900	*1913*	*1918*	*1919*	*1920*	*1921*	*1922*	*1923*	*1924*
Highest	6	5	5	6	7	7	5	4	4
Lowest	3	4½	5	5	6	5	3	3	4
Average . . . . .£	3 19 3	4 15 5	5 0 0	5 3 0	6 14 4	6 2 4	3 13 9	3 9 9	4 0 0

4. PRINCIPAL ASSETS.

	1900	*1913*	*1918*	*1919*	*1920*	*1921*	*1922*	*1923*	*1924*
BANK OF ENGLAND:									
Coin and Bullion . .	29	35	79	91	128	128	127	128	129
Investments	34	32	90	111	126	55	70	69	88
Other Securities in Banking Dept.	29	52	92	107	86	83	78	81	104
JOINT STOCK BANKS									
England and Wales:									
Cash and Call Money . .	144	236	481	453	449	439	423	414	438
Investments	128	121	347	399	369	376	424	404	361
Discounts, &c.	395	540	835	1,130	1,263	1,280	1,103	1,117	1,132
Scotland:									
Cash and Call Money . .	26	34	57	66	73	70	64	64	61
Investments	33	38	94	112	103	115	126	112	104
Discounts, &c.	70	78	114	130	153	151	122	114	123
Ireland:									
Cash and Call Money . .	12	17	57	55	47	43	32	34	31
Investments	18	24	65	77	81	82	103	95	94
Discounts, &c.	37	49	52	75	110	119	105	102	104
Private Banks									
Cash and Call Money . .	11	6	16	13	12	8	9	3	3
Investments	15	8	13	14	6	6	12	5	6
Discounts, &c.	21	17	25	32	36	36	33	28	23
	1,002	1,287	2,417	2,865	3,042	2,991	2,831	2,770	2,801

---

[1] The note issues of the English Joint Stock

[2] Excluding Irish Free

THE UNITED KINGDOM FROM 1900

Numbers. In millions of £'s)

1925	*1926*	*1927*	*1928*	*1929*	*1930*	*1931*	*1932*	*1933*	*1934*	*1935*	*1936*	*1937*	*1938*
169	143	139	120	116	175	174	145	160	135	121	202	169	154
1,807	1,848	1,893	1,951	1,911	1,977	1,821	2,064	2,025	2,062	2,173	2,329	2,348	2,269
241	239	242	249	251	256	244	276	282	287	308	317	330	325
191	184	49[2]	50	49	49	49	54	51	51	51	50	49	48
28	30	30	31	29	27	22	15	16	8	9	10	9	9
2,436	2,444	2,353	2,401	2,356	2,484	2,310	2,554	2,534	2,543	2,662	2,908	2,905	2,805

145	141	139	388	380	369	364	371	392	405	425	467	505	505
22	21	21	21	21	21	21	21	19	21	22	23	24	24
16	15	4[2]	4	4	4	3	3	3	3	4	4	4	4
183	177	164	413	405	394	388	395	414	429	451	494	533	533

Banks and of the Private Banks are now extinct.

5	5	5	4½	6½	5	6	6	2	2	2	2	2	2
4	5	4½	4½	4½	3	2½	2	2	2	2	2	2	2
4 11 0	5 0 0	4 13 0	4 10 0	5 10 0	3 8 5	3 18 7	3 0 2	2	2	2	2	2	2

145	151	152	159	151	153	125	124	195	195	202	314	327	327
84	54	60	312	312	325	349	369	342	344	339	334	334	299
103	97	83	55	51	84	82	41	32	19	23	39	30	50
442	444	493	494	481	472	415	446	446	477	499	566	522	505
318	308	291	293	285	329	329	521	612	637	654	692	664	653
1,168	1,209	1,221	1,269	1,251	1,281	1,166	1,188	1,057	1,041	1,114	1,174	1,263	1,212
60	60	61	63	62	64	60	68	67	71	76	76	83	80
95	91	89	83	84	98	101	137	158	161	178	186	188	184
131	133	139	150	154	146	134	123	108	106	107	105	115	114
26	24	8[2]	7	6	6	6	8	6	7	7	7	6	6
92	87	19[2]	20	20	22	21	22	26	26	27	27	27	26
104	102	33[2]	33	33	32	31	32	27	25	25	24	25	24
3	4	4	4	4	4	2	2	3	4	5	6	3	3
5	5	6	6	4	6	2	3	3	3	3	3	2	3
22	24	23	24	24	20	21	12	13	4	4	4	5	5
2,798	2,793	2,682	2,972	2,922	3,042	2,844	3,096	3,095	3,120	3,263	3,557	3,594	3,491

State since 1927.

TABLE XI. WEEKLY RETURN OF THE BANK OF ENGLAND

Accounts pursuant to the Act 7th and 8th Victoria cap. 32 for weeks ended Wednesday, July 5, 1914, and November 21, 1928

ISSUE DEPARTMENT

	July 5, 1914 £	*Nov.* 21, 1928 £		*July* 5, 1914 £	*Nov.* 21, 1928 £
Notes issued	56,908,235	180,964,085	Government debt	11,015,100	11,015,100
			Other securities	7,434,900	8,734,900
			Gold coin and bullion	38,458,235	161,214,085
	56,908,235	180,964,085		56,908,235	180,964,085

BANKING DEPARTMENT

	£	£		£	£
Proprietor's capital	14,553,000	14,553,000	Government securities	11,005,126	48,340,327
Rest	3,431,484	3,204,147	Other securities	33,623,288	34,757,491
Public deposits[1]	13,318,714	14,898,189	Notes	27,592,980	48,161,710
Other deposits	42,485,605	99,472,105	Gold and silver coin	1,596,419	870,504
Seven-day and other bills	29,010	2,591			
	73,817,813	132,130,032		73,817,813	132,130,032

---

[1] Including Exchequer, Savings Banks, Commissioners of National Debt, and Dividend Accounts.

TABLE XII. BANK OF ENGLAND'S WEEKLY RETURN

(*a*) QUARTERLY AVERAGES, 1914–28 (£'s millions)

Quarter ending	*Coin and Bullion*	*Note Circulation*	*Deposits*		*Securities in Banking Dept.*	*Reserve*	*Proportion %*
			Total	*Of which Bankers'*			
1914 Mar.	41·4	28·5	62·4	..	49·1	31·4	50·3
June	37·0	28·9	61·0	..	52·2	26·6	43·6
Sept.	42·2	33·6	111·5	..	102·6	27·0	24·2
Dec.	67·4	35·4	162·3	..	129·6	50·4	31·1
1915 Mar.	64·0	34·5	169·2	..	139·6	47·8	28·3
June	57·2	34·1	216·0	..	192·1	41·6	19·3
Sept.	62·6	32·8	222·3	..	192·2	48·2	21·7
Dec.	54·5	33·6	149·1	..	127·5	39·4	26·4
1916 Mar.	54·0	33·5	154·3	..	133·4	39·0	25·3
June	59·6	34·7	142·6	..	117·0	43·3	30·4
Sept.	56·4	36·1	150·3	..	129·6	38·8	25·8
Dec.	55·7	37·5	166·3	..	147·4	36·6	22·0
1917 Mar.	55·4	38·8	203·1	..	186·2	35·0	17·2
June	55·4	38·7	173·9	..	156·5	35·1	20·1
Sept.	53·9	40·3	171·4	..	157·3	32·1	18·7
Dec.	56·5	42·9	166·4	..	152·2	32·0	19·2
1918 Mar.	59·3	46·5	169·9	..	156·7	31·3	18·4
June	62·4	50·2	171·8	..	158·9	30·7	17·9
Sept.	68·4	57·2	173·3	..	161·6	29·7	17·1
Dec.	75·2	65·8	169·4	..	159·0	28·2	16·6
1919 Mar.	81·9	70·9[1]	151·5	..	140·0	29·5	19·5
June	86·3	77·2	148·1	..	138·2	27·6	18·6
Sept.	88·3	80·0	133·8	..	125·4	26·4	19·7
Dec.	89·4	84·4	145·4	..	142·4	20·8	14·3
1920 Mar.	106·6	90·7	157·3	83·4	145·3	30·0	19·1
June	114·2	103·1	143·8	84·3	140·4	21·1	14·7
Sept.	122·9	106·9	133·1	78·4	135·0	16·0	12·0
Dec.	124·7	110·5	146·2	87·2	150·1	13·8	9·4
1921 Mar.	128·3	109·6	136·2	80·6	136·6	17·7	13·0
June	128·4	109·1	138·5	82·6	137·9	18·3	13·2
Sept.	128·4	107·4	139·0	86·4	137·0	20·0	14·4
Dec.	128·4	105·3	145·3	93·8	141·0	22·1	15·2
1922 Mar.	128·7	103·3	148·6	90·8	142·2	24·4	16·4
June	128·9	102·5	136·8	81·5	129·2	25·4	18·6
Sept.	127·5	102·7	125·7	72·6	121·6	22·2	17·7
Dec.	127·4	101·7	126·6	75·3	121·3	23·0	18·2
1923 Mar.	127·5	100·8	130·8	73·0	124·9	24·0	18·3
June	127·5	101·3	122·4	68·2	116·6	23·5	19·2
Sept.	127·6	102·8	122·6	68·8	118·4	22·3	18·2
Dec.	127·8	102·7	126·7	69·9	122·0	22·5	17·8
1924 Mar.	128·1	103·2	124·7	69·1	120·5	22·3	17·9
June	128·2	103·1	125·8	68·8	121·3	22·3	17·7
Sept.	128·3	103·5	122·9	68·6	118·4	22·6	18·4
Dec.	128·5	101·1	131·4	72·9	125·4	23·8	18·1
1925 Mar.	128·6	97·8	128·4	71·2	122·9	23·6	18·4
June	149·9	93·7	125·3	69·5	114·9	28·2	22·5
Sept.	162·3	88·7	127·4	72·0	107·9	37·7	29·6
Dec.	148·7	86·8	126·5	72·8	118·9	25·4	20·1
1926 Mar.	145·0	85·4	125·3	66·7	120·3	23·1	18·4
June	148·3	84·7	123·9	69·8	114·6	27·1	21·9
Sept.	153·8	84·7	121·5	68·6	107·1	32·6	26·8
Dec.	152·9	83·1	124·0	68·7	108·6	33·2	26·8
1927 Mar.	150·8	81·1	123·6	69·5	108·6	33·2	26·9
June	153·0	80·7	118·1	65·1	100·0	35·8	30·3
Sept.	151·5	80·9	116·5	65·2	100·6	34·1	29·3
Dec.	150·0	80·3	119·6	66·2	103·2	34·2	37·0
1928 Mar.	156·7	78·9	117·3	66·9	94·2	41·3	35·2
June	163·1	79·2	117·4	62·9	87·8	47·4	40·4
Sept.	175·1	79·4	119·8	68·6	78·9	59·1	49·3
Nov. 21	164·6	77·6	115·0	62·3	81·3	51·5	44·8

---

[1] Excluding Bank of England Notes in Currency Notes Redemption Account.

TABLE XII. (*b*) QUARTERLY AVERAGES FROM NOVEMBER 1928

(£'s millions)

Quarter ending	*Coin and Bullion*	*Note Circulation*	*Note Gold %*	*Deposits*		*Securities in Banking Dept.*	*Reserve*	*Proportion %*
				Total	*Bankers'*			
1928 Dec.	156·3	377·1	31·0	116·7	67·5	94·7	39·9	34·0
1929 Mar.	152·4	358·4	27·4	116·9	64·0	81·1	54·0	46·2
June	160·1	361·4	28·0	113·7	62·1	73·8	58·8	51·7
Sept.	143·3	367·3	29·2	115·8	63·9	98·0	36·0	31·1
Dec.	134·8	362·1	28·2	111·0	61·5	96·1	32·7	29·5
1930 Mar.	151·9	351·7	25·9	117·2	63·8	75·3	60·1	51·3
June	160·0	359·4	27·6	117·4	63·0	74·6	60·6	51·6
Sept.	155·7	363·2	28·5	112·2	66·4	78·0	52·5	46·8
Dec.	156·4	360·6	27·8	116·5	66·7	78·4	55·8	47·9
1931 Mar.	142·8	350·0	25·6	109·4	61·8	74·7	52·8	48·3
June	153·0	353·9	26·5	111·1	61·1	71·8	59·1	53·2
Sept.	141·0	356·4	24·2	121·4	62·9	84·6	54·9	45·3
Dec.	126·3	359·0	23·4	131·3	71·7	106·9	42·3	32·1
1932 Mar.	121·4	352·0	21·8	123·6	73·8	97·4	44·4	35·9
June	126·8	357·1	23·0	130·9	77·8	104·6	44·7	34·1
Sept.	139·1	365·8	24·8	134·9	85·0	104·7	48·4	35·8
Dec.	137·4	363·0	24·3	137·8	88·1	106·3	49·3	35·8
1933 Mar.	141·5	359·5	23·5	156·2	102·5	117·4	57·0	36·5
June	181·6	373·6	30·4	151·2	98·3	96·4	72·5	47·9
Sept.	191·5	376·6	30·9	164·2	95·9	107·6	74·8	45·6
Dec	191·8	375·2	30·7	159·5	104·2	100·7	76·6	48·0
1934 Mar.	191·9	369·7	29·7	162·9	105·5	98·9	82·1	50·4
June	192·1	378·2	31·2	153·3	102·2	97·2	73·9	48·2
Sept.	192·3	382·8	32·0	152·8	92·9	101·5	69·4	45·4
Dec.	192·7	384·0	32·3	153·6	99·9	102·7	68·7	44·7
1935 Mar.	193·0	379·1	31·4	159·5	103·7	103·8	73·9	46·3
June	193·3	392·6	33·8	151·6	102·7	108·7	60·7	40·0
Sept.	193·7	402·0	35·3	145·8	94·1	115·3	51·7	35·5
Dec.	197·3	405·0	35·8	143·6	85·9	109·1	52·3	36·4
1936 Mar.	201·1	401·7	35·2	154·1	104·1	112·9	59·4	38·5
June	206·4	424·5	38·8	141·6	90·6	117·5	41·9	29·6
Sept	241·2	445·8	41·8	155·0	95·3	117·7	55·4	35·7
Dec.	264·5	452·6	45·0	154·6	93·0	114·4	58·0	37·5
1937 Mar.	314·3	459·6	56·3	151·3	95·2	114·3	54·7	36·2
June	319·5	475·7	56·7	157·0	99·0	130·3	44·1	28·1
Sept.	327·7	492·5	59·4	151·7	97·1	134·6	35·2	23·2
Dec.	327·9	490·6	57·0	155·7	95·8	125·5	48·0	30·8
1938 Mar.	327·1	478·9	57·5	164·5	114·1	131·0	51·5	31·3
June	327·2	487·3	59·0	161·1	105·8	138·9	40·0	24·8
Sept.	327·6	486·6	58·9	159·6	105·1	136·7	41·0	25·7
Dec.	327·6	490·3	57·2	157·3	99·7	127·8	47·3	30·0
1939 Mar.	177·2	475·3	25·7	162·1	110·2	125·9	54·4	33·4
June	226·9	494·0	39·3	156·3	97·8	141·1	33·0	21·1
Sept.								
Dec.								

TABLE XIII. CLEARING BANKS' STATISTICS

(*a*) HALF YEARLY, 1913–20 (£'s millions)

Date		*Deposits*	*Cash in hand and at Bank of England*	*Percentages on Deposits*	*Call Money*	*Discounts, Loans, and Advances*	*Investments*
1913	Dec.	670·6	111·1	16·6	90·3	362·4	96·6
1914	June	708·5	108·9	15·4	94·0	455·7	109·3
	Dec.	785·5	166·6	21·2	76·6	431·2	131·0
1915	June	899·2	201·1	22·4	98·1	489·2	162·3
	Dec.	870·9	171·0	19·6	66·3	376·5	280·0
1916	June	940·8	180·0	19·1	80·8	448·7	283·3
	Dec.	1,032·1	241·6	23·4	91·6	452·0	288·7
1917	June	1,015·5	182·9	18·0	71·1	548·6	265·5
	Dec.	1,224·2	230·9	18·9	162·9	578·6	289·8
1918	June	1,287·6	243·1	18·9	157·4	666·1	285·5
	Dec.	1,441·5	265·6	18·4	187·8	722·3	309·9
1919	June	1,673·8	333·9	19·9	316·4	779·5	322·5
	Dec.	1,703·1	309·2	18·2	105·5	1,001·5	365·1
1920	June	1,758·7	298·1	17·0	94·3	1,002·4	368·4
	Dec.	1,798·1	304·1	16·9	112·9	1,137·0	344·5

(*c*) QUARTERLY AVERAGES FROM 1931

Quarters ending		*Deposits*	*Cash in hand and at Bank of England*	*Percentages on Deposits*	*Call Money*	*Discounts*	*Loans and Advances*	*Investments*
1931	Mar.	1,818·9	190·6	10·47	124·8	290·4	928·3	305·8
	June	1,751·8	181·8	10·37	127·2	233·6	932·6	295·6
	Sept.	1,748·2	179·1	10·24	116·9	260·5	910·8	301·8
	Dec.	1,722·5	177·9	10·32	114·4	241·4	903·2	299·9
1932	Mar.	1,683·0	175·6	10·43	113·2	221·2	903·1	281·6
	June	1,714·6	181·2	10·56	113·0	254·8	868·2	309·1
	Sept.	1,839·8	192·0	10·47	118·1	361·3	818·4	365·1
	Dec.	1,925·0	197·5	10·25	119·9	396·5	784·5	436·3
1933	Mar.	1,954·9	209·5	10·72	111·4	388·3	765·4	493·4
	June	1,950·9	212·5	10·55	101·2	345·2	771·2	530·7
	Sept.	1,965·6	209·2	10·64	92·4	358·7	756·8	560·2
	Dec.	1,940·0	215·9	11·13	102·4	323·8	740·1	564·3
1934	Mar.	1,872·8	217·0	11·59	122·5	245·4	743·2	554·9
	June	1,860·3	213·0	11·45	134·5	220·6	757·0	541·4
	Sept.	1,861·6	204·5	10·99	137·6	219·6	756·2	556·6
	Dec.	1,924·2	213·0	11·07	140·3	234·5	754·8	586·4
1935	Mar.	1,953·1	217·4	11·13	132·6	252·0	758·4	604·7
	June	1,968·4	217·5	11·05	140·8	220·3	773·5	620·6
	Sept.	2,018·7	213·5	10·58	146·8	286·6	767·3	616·3
	Dec.	2,055·5	213·1	10·37	149·2	304·0	775·4	617·4
1936	Mar.[1]	2,131·7	224·4	10·53	159·6	297·5	828·4	631·6
	June	2,189·2	224·1	10·24	159·4	302·2	867·8	639·3
	Sept.	2,248·7	229·2	10·19	162·6	345·7	876·4	642·6
	Dec.	2,294·3	234·6	10·22	179·9	33 39	887·6	656·9
1937	Mar.	2,275·0	231·2	10·16	171·9	299·8	906·0	669·3
	June	2,266·8	234·6	10·34	171·9	248·1	954·3	657·3
	Sept.	2,287·8	235·7	10·30	162·1	280·0	971·1	644·4
	Dec.	2,317·9	237·7	10·25	162·7	299·6	983·0	635·8
1938	Mar.	2,287·7	245·9	10·75	149·3	285·6	980·1	634·1
	June	2,276·7	241·4	10·61	149·9	272·5	985·2	632·6
	Sept.	2,292·0	239·7	10·46	153·4	298·4	973·2	640·1
	Dec.	2,252·7	236·8	10·51	152·3	263·7	965·7	640·8
1939	Mar.	2,186·2	241·2	11·03	140·7	219·3	977·9	617·2
	June	2,180·1	233·4	10·71	146·2	211·2	989·3	605·1
	Sept.							
	Dec.							

[1] Eleven, including District Bank.

Table XIII. (*b*) Quarterly Averages, 1919–31

(Compiled from the Macmillan Committee Report)

Quarter ending		*Current Accounts*	*Deposits*	**Total**	*Cash*		**Total**	*Percentages on Deposits*	*Money at call*	*At short notice*		**Total**	*Discounts*		**Total**	*Loans and Advances*	*Investments*
					In hand	*At Bank of England*				*To Money Market*	*To Stock Exchanges*		*Treasury Bills*	*Commercial Bills*			
1919	Mar.	955·4	450·7	1,406·1	105·9	87·9	193·8	*13·8*	25·0	104·2	14·4	143·6	202·4	91·7	294·0	488·5	325·4
	June	1,015·4	489·9	1,505·3	113·6	140·0	253·6	*16·8*	25·1	119·0	14·9	159·0	180·9	91·0	271·9	515·6	329·1
	Sept.	1,017·7	498·8	1,516·0	112·4	93·6	205·9	*13·6*	21·7	86·6	17·3	125·6	127·8	104·6	232·4	620·1	375·2
	Dec.	1,075·1	540·0	1,615·0	117·9	93·9	211·8	*13·1*	20·0	53·7	24·1	97·8	126·0	140·0	266·1	694·4	376·0
1920	Mar.	1,123·0	572·3	1,695·3	104·8	77·7	182·5	*10·8*	21·4	55·6	25·4	102·3	88·5	152·8	241·3	818·4	375·4
	June	1,099·1	600·4	1,699·5	101·8	89·0	190·8	*11·2*	23·3	49·3	22·6	95·1	77·2	134·1	211·2	855·6	369·8
	Sept.	1,076·9	641·6	1,718·5	106·7	73·9	180·6	*10·5*	24·7	55·8	21·1	101·5	129·1	140·3	269·4	834·5	367·5
	Dec.	1,091·5	674·0	1,765·5	109·8	94·3	204·1	*11·6*	26·0	56·6	18·9	101·5	167·5	149·8	317·2	817·9	358·2
1921	Mar.	1,049·3	694·3	1,743·6	110·2	83·7	193·9	*11·1*	22·0	49·9	18·9	90·8	167·3	148·9	316·2	825·8	351·2
	June	1,005·2	720·8	1,726·0	112·5	96·9	209·4	*12·1*	26·5	54·6	19·1	100·2	184·8	132·4	317·2	808·9	345·3
	Sept.	1,014·9	740·9	1,755·8	112·3	89·4	201·7	*11·5*	30·2	58·0	16·9	105·1	262·4	129·3	391·7	778·1	342·0
	Dec.	1,029·5	759·6	1,789·1	108·0	114·3	222·2	*12·4*	30·2	56·8	17·2	104·2	283·8	125·6	409·4	748·0	356·8
1922	Mar.	1,016·2	749·5	1,765·6	109·3	90·9	200·2	*11·3*	32·6	58·6	21·7	112·8	255·0	120·1	375·1	728·9	407·7
	June	999·1	730·3	1,729·4	107·0	98·1	205·2	*11·9*	32·8	61·8	24·4	119·0	201·2	112·8	314·0	707·0	434·7
	Sept.	982·5	689·3	1,671·8	109·1	83·6	192·7	*11·5*	26·7	58·9	24·3	109·9	190·3	108·8	299·0	697·8	436·7
	Dec.	995·6	667·4	1,663·0	104·5	98·9	203·4	*12·2*	26·6	56·0	23·2	105·8	185·5	111·7	297·3	713·6	403·1
1923	Mar.	980·3	644·2	1,624·5	105·2	81·1	186·3	*11·5*	25·5	59·4	25·2	110·1	166·5	117·0	283·5	726·6	381·1
	June	965·5	638·6	1,604·1	101·1	89·5	190·6	*11·9*	25·4	61·7	27·6	114·8	136·3	118·7	255·0	731·0	371·0
	Sept.	953·7	646·1	1,599·8	104·7	83·2	187·9	*11·7*	23·7	60·3	22·0	106·0	140·7	121·7	262·4	725·4	379·8
	Dec.	962·9	665·1	1,628·0	104·2	95·4	199·6	*12·3*	24·5	59·3	23·1	106·9	140·9	121·7	262·6	735·0	378·7

1924	Mar.	948·5	667·8	1,616·3	103·8	83·7	187·5	*11·6*	23·1	55·4	20·3	98·8	118·8	126·0	244·8	756·6	383·9
	June	953·7	662·9	1,616·6	102·7	93·3	196·0	*12·1*	25·8	54·4	22·8	103·0	97·5	125·7	223·2	774·1	369·1
	Sept.	943·8	662·9	1,606·6	103·9	80·0	183·8	*11·4*	24·9	59·3	22·2	106·4	103·9	124·5	228·4	775·4	361·7
	Dec.	954·2	669·3	1,623·5	104·7	96·2	200·9	*12·4*	24·4	59·5	26·0	109·9	98·9	125·8	224·7	790·7	344·2
1925	Mar.	937·3	669·7	1,607·0	105·3	79·0	184·3	*11·5*	24·4	59·9	31·8	116·0	89·4	131·5	220·9	810·9	325·4
	June	908·9	685·8	1,594·7	103·0	91·4	194·4	*12·2*	23·9	58·8	29·8	112·5	72·5	119·2	191·7	831·4	309·5
	Sept.	910·4	686·5	1,596·9	104·9	79·0	183·9	*11·5*	26·3	65·8	28·3	120·4	106·9	125·7	232·6	822·5	292·8
	Dec.	933·6	678·7	1,612·2	101·5	95·3	196·8	*12·2*	24·6	60·0	32·4	117·0	95·0	134·1	229·1	821·8	294·0
1926	Mar.	914·2	670·9	1,585·1	104·4	78·9	183·4	*11·6*	24·8	57·8	31·8	114·5	82·2	122·1	204·3	846·1	287·7
	June	911·1	676·9	1,587·9	103·5	88·8	192·3	*12·1*	25·9	60·4	30·8	117·0	82·0	109·9	192·0	855·2	279·3
	Sept.	920·8	691·4	1,612·2	102·4	83·7	186·1	*11·5*	24·0	68·3	30·7	123·1	120·0	101·6	221·7	856·7	283·2
	Dec.	939·6	710·7	1,650·3	101·9	92·9	194·8	*11·8*	25·2	66·1	35·0	126·3	119·5	97·5	217·0	874·1	287·7
1927	Mar.	913·2	721·4	1,634·6	104·5	79·5	183·9	*11·3*	24·8	67·1	35·0	126·9	119·7	94·1	213·7	889·5	278·2
	June	924·7	723·4	1,648·1	106·6	91·6	198·2	*12·0*	24·1	71·6	39·6	135·2	92·9	100·2	193·1	899·7	270·5
	Sept.	933·8	718·7	1,652·5	106·0	78·5	184·5	*11·2*	25·7	78·0	39·6	143·3	110·4	99·2	209·6	904·3	270·8
	Dec.	956·8	742·4	1,699·2	103·4	91·8	195·2	*11·5*	26·4	84·8	44·0	155·1	127·2	100·2	227·4	903·2	270·7
1928	Mar.	938·3	738·7	1,677·6	106·0	72·9	178·9	*10·7*	29·5	77·9	47·8	155·2	102·7	109·2	212·0	915·3	277·7
	June	945·4	741·8	1,687·2	100·2	86·1	186·3	*11·0*	28·1	78·1	49·8	156·0	87·6	115·9	203·6	923·7	269·5
	Sept.	952·8	761·8	1,714·6	103·6	80·7	184·3	*10·7*	27·8	78·9	44·2	150·8	121·4	125·6	247·0	921·6	275·1
	Dec.	977·8	778·5	1,756·3	108·0	94·8	202·8	*11·5*	28·3	75·8	50·1	154·2	119·1	122·1	241·2	933·7	279·1
1929	Mar.	955·7	788·3	1,744·0	104·8	81·6	186·4	*10·7*	25·8	69·5	45·8	141·2	107·1	132·2	239·3	960·7	278·4
	June	940·3	790·2	1,730·5	100·4	85·5	185·9	*10·7*	28·8	73·4	46·9	149·2	80·3	120·5	200·8	970·1	276·7
	Sept.	937·5	797·1	1,734·6	105·5	72·7	178·2	*10·3*	28·5	78·6	44·9	150·9	104·2	121·8	226·0	966·8	275·5
	Dec.	927·2	816·0	1,743·1	106·7	91·8	198·6	*11·4*	32·5	82·4	35·9	150·9	101·6	116·9	218·5	958·3	269·5
1930	Mar.	890·3	799·2	1,689·5	104·6	71·6	176·3	*10·4*	34·6	74·7	32·6	141·8	95·1	111·9	207·0	958·9	265·9
	June	917·7	814·6	1,732·3	101·5	88·4	189·9	*11·0*	30·8	75·8	33·9	140·6	99·4	141·5	240·8	947·5	268·4
	Sept.	926·7	823·5	1,750·2	104·0	79·7	183·8	*10·5*	32·3	85·6	24·7	142·5	144·5	131·5	276·0	922·1	288·7
	Dec.	948·5	842·9	1,791·3	104·0	98·4	202·4	*11·3*	34·7	84·2	22·7	141·6	175·7	123·9	299·5	905·3	303·2
1931	Mar.	923·3	823·2	1,746·5	101·4	76·8	178·3	*10·2*	30·9	72·4	21·4	124·6	164·3	109·8	274·1	902·3	331·5

TABLE XIV. LONDON COURSE OF EXCHANGE

On	*Usance*	*Par of Exchange*	*Price negotiated on change. Thursday, July 16, 1914*	*Par of Exchange*	*July 18, 1931*	*Range of Business June 21, 1939*
Amsterdam, &c. .	Cheques	12·07 florins and stivers to £1	12·2⅜–12·2⅝	12·107 florins and cents	12 02½–0·03½	8·81¾–82¼
„ . .	3 months	„ „ „	12·4⅝–12·5⅛			
Antwerp and Brussels	„	25 22½ francs and centimes to £1	25·50–25·55	35 belgas (175 francs)[1]	34·79–80	27·52–55
Hamburg, Berlin, &c.	„	20 40 marks and pfennigs „	20 63–20 67	20·43 marks	20¾–21*nom*	11·66½–67½
Paris . . .	Cheques	25·22½ francs and centimes „	25·17½–25 20	124·21 francs	123⅜–½	176 $\frac{11}{16}$–¾
Paris and Marseilles.	3 months	„ „ „	25 36¼–25 41¼			
Switzerland . .	„	„ „ „	25·37½–25·42½	25·22½ francs	24·97–98	20·6½–77½
Austria . . .	„	24·02 kronen and heller „	24·41–24·45	34 58½ schillings	34·60–70	
St. Petersburg (Petrograd) and Moscow .	„	25·6 pence to 1 rouble	24½–24¾	9·46 roubles	9·446–465	24.81¾–⅞
Genoa . . .	„	25·22½ lire and centesimi to £1	25·56¼–25 61¼	92 46 lire	92·96–98	89–89⅛
New York . .	60 days	49·32 pence to $1	48 $\frac{11}{16}$–48 $\frac{13}{16}$	4·86.6 dollars and cents	4 84–75	4·68 $\frac{1}{16}$–$\frac{5}{16}$
Madrid . . .	3 months	47 6 „ 5 pesetas	45 $\frac{1}{16}$–45 $\frac{3}{16}$	25·22½ pesetas	51·70–80	42¼ (Burgos)
Lisbon and Oporto .	„	53¼ „ 1 milreis	45 $\frac{9}{16}$–45 $\frac{13}{16}$	110 escudos	109½–10½	110–110½
Copenhagen . .	„	18·159 kroner and ore to £1	18·48–18 52	as pre-war	18 16¼–16¾	22·38–42
Christiania (Oslo) .	„	18 159 „ „ „	18 48–18·52		18 16¼–16¾	19·88–92
Stockholm . .	„	18·159 „ „ „	18·48–18 52		18 14–14½	19·40–44
Buenos Ayres . .	Cable	.. pence to 1 peso (dollar) gold	..	47·62 pence to 1 peso	34¼–⅜	20.17–23
Calcutta and Bombay	Demand	.. pence to 1 rupee	..	18 pence to 1 rupee	17 $\frac{13}{16}$–$\frac{27}{32}$	17⅞–$\frac{15}{16}$

---

[1] Raised to 48 611 Belgas to a sovereign on April 1, 1935.

Since the war all rates are for Telegraphic Transfer or Cable.

Since we went off the Gold Standard all pars of exchange are of course nominal.

TABLE XV. FOREIGN TRADE OF THE UNITED KINGDOM FROM 1861

(From the Statistical Abstracts and Annual Statement of Trade)
(In millions of £'s, excluding bullion and specie)

Year	*Total imports (general)*	*Net imports (special)*	*Re-exports*	*Exports of home produce (special)*	*Total exports (general)*	*Apparent excess of imports*
1861	..	183	..	125	..	58
1871	..	271	..	223	..	48
1881	..	334	..	234	..	100
1891	..	374	..	247	..	127
1901	522	454	68	280	348	174
2	528	463	66	283	349	180
3	543	473	70	291	360	182
4	551	481	70	301	371	180
5	565	487	78	330	408	157
6	608	523	85	376	461	147
7	646	554	92	426	518	128
8	593	513	80	377	457	136
9	625	533	91	378	470	155
1910	678	574	104	430	534	144
1	680	577	103	454	557	123
2	745	633	112	487	599	146
3	769	659	110	525	635	134
4	697	602	95	431	526	171
5	852	753	99	385	484	368
6	949	851	98	507	604	345
7	1,064	994	70	527	597	467
8	1,316	1,285	31	501	532	784
9	1,626	1,461	165	799	963	663
1920	1,933	1,710	223	1,334	1,557	376
1	1,086	979	107	703	810	276
2	1,003	899	104	720	823	180
3	1,096	977	119	767	886	210
4	1,277	1,137	140	801	941	336
5	1,321	1,167	154	773	927	394
6	1,241	1,116	125	653	779	463
7	1,218	1,095	123	709	832	386
8	1,196	1,073	120	724	844	352
9	1,221	1,111	110	729	839	382
1930	1,044	957	87	571	658	386
1	861	797	64	391	454	407
2	702	652	51	365	416	287
3	675	626	49	368	417	258
4	732	681	51	396	447	285
5	756	701	55	426	481	275
6	848	787	61	441	502	346
7	1,028	953	75	522	597	431
8	920	858	62	470	532	388

TABLE XVI. VOLUME OF BRITISH

(From the Reports of the Liverpool

	1913	*1918*	*1923*	*1924*	*1925*	*1926*	*1927*	*1928*
Weights of Imports (tons—000's):								
Food, Drink, and Tobacco. .	18,705	11,380	17,600	20,300	18,600	18,000	19,000	18,500
Raw Materials .	28,943	19,740	25,500	27,200	25,200	20,500	27,500	24,000
Manufactures .	8,354	1,980	8,900	11,000	11,200	14,000	15,000	14,000
Total .	56,002	33,100	52,000	58,500	55,000	52,500	61,500	56,500
Tonnage Entrances (tons net—000's).								
British ships .	32,292	19,791	33,081	36,857	37,968	43,523	40,421	40,220
Foreign ships .	16,772	3,416	18,013	18,512	17,536	20,658	20,168	20,117
Total .	49,064	23,207	51,094	55,369	55,504	64,181	60,589	60,337
Average weight of imports per 100 tons net of shipping entrances .	114	142	102	106	99	98	104	94
Weights of Exports (tons—000's):								
Coal, Coke, &c.	76,687	34,174	84,487	65,532	54,090	21,863	54,304	53,684
General .	15,116	..	12,550	12,967	13,200	11,500	13,600	14,300
Transhipment .	1,821	..	1,500	1,640	1,700	1,250	1,300	1,350
Total .	93,624	..	98,537	80,139	68,990	34,613	69,204	69,334
Tonnage Clearances (tons net—000's).								
British ships .	40,101	14,966	42,139	41,732	41,413	33,858	42,363	43,378
Foreign ships .	27,718	7,771	28,552	23,567	20,897	13,094	21,134	21,070
Total .	67,819	22,737	70,691	65,299	62,310	46,952	63,497	64,448
Estimate of cargo other than coal carried per 100 tons net of clearances . .	57	..	49	45	42	35	41	39

IMPORTS AND EXPORTS FROM 1913

Steamship Owners' Association)

1929	*1930*	*1931*	*1932*	*1933*	*1934*	*1935*	*1936*	*1937*	*1938*
19,000	18,800	21,400	20,700	20,400	20,900	21,000	22,000	22,000	27,000
27,000	24,600	19,200	19,100	22,300	26,900	26,950	33,800	35,600	28,600
14,500	15,300	14,600	12,500	12,700	14,600	14,850	16,200	17,700	16,700
60,500	58,700	55,200	52,300	55,400	62,400	62,800	72,000	75,300	67,300
40,747	40,787	38,212	35,521	35,364	36,127	36,110	38,055	39,289	38,908
21,954	22,928	22,088	23,848	25,064	26,541	27,518	29,340	31,130	29,464
62,701	63,715	60,300	59,369	60,428	62,668	63,628	67,935	70,419	68,372
96	92	91	88	92	100	99	107	107	98
64,401	58,350	45,909	41,895	42,148	42,582	41,870	37,361	43,477	38,196
15,400	12,500	9,100	9,000	8,800	10,100	10,600	10,700	12,300	10,500
1,550	1,400	1,250	1,100	950	950	950	950	1,200	970
81,351	72,250	56,259	51,995	51,898	53,642	53,420	48,011	56,977	49,666
45,342	42,620	38,164	34,850	33,841	33,796	34,302	34,305	35,982	34,512
23,342	23,233	20,175	20,591	21,795	22,294	23,019	22,516	25,405	24,367
68,684	65,853	58,339	55,441	55,636	56,090	57,321	56,821	61,387	58,879
43	35	28	28	27	30	30	29	32	28

TABLE XVII. U.K. BALANCE OF TRADE, VISIBLE AND INVISIBLE, FROM 1913

(From the Board of Trade Journal in January each year)

Year	*1913*	*1920*	*1925*	*1930*	*1931*	*1932*	*1933*	*1934*	*1935*	*1936*	*1937*	*1938*
Visible.												
Imports. Merchandise	769	1,933	1,321	1,044	861	702	675	731	756	848	1,028	920
Bullion and Specie[1]	74	61	52	95	107	160	262	285	285	331	315	258
Total	843	1,994	1,373	1,139	968	862	937	1,016	1,041	1,179	1,343	1,178
Exports. Merchandise	635	1,557	927	658	454	416	417	447	481	501	597	532
Bullion and Specie[1]	62	104	62	90	140	140	66	141	229	105	225	332
Total	697	1,661	989	748	594	556	483	588	710	606	822	864
Excess of Visible Imports	146	333	384	391	374	306	454	428	331	573	521	314
Invisible.												
Excess of government receipts from Overseas	..	..	..	19	14	−24	−2	7	−2	−3	−4	−13
Net National Shipping Income	94	340	124	105	80	70	65	70	70	85	130	100
Net Income from Overseas Investments	210	200	239	220	170	145	160	170	185	200	210	200
Net receipts for Short Interest and Commissions	25	40	60	55	30	25	30	30	30	35	40	35
Net receipts from other sources	10	15	15	15	10	15	10	10	10	10	10	..
Total Invisible Exports	339	595	438	414	304	231	263	287	293	327	386	322
Estimated Net Balance	+193	+262	+54	+23	−70	−75	−191	−141	−38	−246	−135	+8
New Overseas Investments	198	60	88	109	46	29	38	44	21	26	32	25

---

[1] Both gold and silver.

TABLE XVIII. BANK RATE CHANGES FROM 1914

	%		%		%		%		%		%
1914 Jan. 8	4½	1916 July 10	6½	1921 Nov. 3	5	1925 Oct. 1	4	1930 Feb. 6	4½	1932 Feb. 8	5
,, 22	4	1917 Jan. 18	5½	1922 Feb. 17	4½	Dec. 3	5	Mar. 6	4	Mar. 10	4
,, 29	3	Apr. 5	5	Apr. 4	4	1927 Apr. 21	4½	,, 20	3½	,, 17	3½
July 30	4	1919 Nov. 6	6	June 15	3½	1929 Feb. 7	5½	May 1	3	Apr. 21	3
,, 31	8	1920 Apr. 15	7	July 13	3	Sept. 26	6½	1931 May 14	2½	May 12	2½
Aug. 1	10	1921 Apr. 29	6½	1923 July 5	4	Oct. 31	6	July 23	3½	June 30	2
,, 7	6	June 23	6	1925 Mar. 5	5	Nov. 21	5½	,, 30	4½		
,, 8	5	July 21	5½	Aug. 6	4½	Dec. 12	5	Sept. 21	6		

INDEX

Accepting houses, 85, 102, 122, 129, 190.
Accommodation bills, 73.
American banking crisis, 217.
  banking system, 212.
  credits, 177, 191, 209.
  currency, 212.
  debt, 136, 175, 190, 214, 216, 220.
  dollars, 9, 51, 56, 212.
  exchanges, 119, 130, 138, 167, 175, 207, 219, 221.
  moratorium, 190, 214.
  securities, 136, 138.
  silver legislation, 51, 168, 221.
  tourists, 137.
Assignats, 59, 174.
Austria, 174, 189.
Authorized issue, 94, 165, 179.

Bad money, 216.
Bagehot, Walter, 87.
Balance of Trade, 104, 133–8, 173, 210.
Bank assets and liabilities, 75.
  current accounts, 65.
  dealer in capital, 68.
  deflation, 159, 161.
  deposits, 68, 100, 146, 158, 200, 224.
  discounts, 68, 70, 83, 111.
  early history of, 87.
  failures, 113, 211.
  functions of, 65–8.
  reserves, 76.
  statistics, 99.
Bank Act, 1844, 87, 92.
  suspension of, 115, 124.
Bank for International Settlements, 185,
Bank notes, 24, 44, 62, 70–5, 228.
  as legal tender, 72, 179.
  change of, 120, 181
  first in Sweden, 87.
  in Scotland, 92, 120, 185.
  silver against, 94, 179.
  systems of regulation, 95.
Bank of England, 77, 111, 149, 163–86, 191, 216, 223.
  and the mint, 33, 79, 176.
  during 1914 crisis, 118, 124, 129.
  French and American credits, 191.
  gold holdings, 94, 191, 199, 216.
  gold reserves abroad, 130, 135.
  history of the, 88.
  in a crisis, 113
  notes, 90, 120, 163, 179.
  Open Market purchases, 223.
  price of gold, 32, 176.
  Proportion, 97, 157.
  Reserve, 76, 96, 114, 141, 208.
  revaluation of gold, 234.
  Statistical summary, 179, 202.
  suspension of gold payments by, 43, 83, 90, 194, 207.
  suspension of the Act, 115, 124.
  Weekly Return, 96, 182.
Bank rate, 111, 120, 129, 176, 191, 208.
Bankers' Clearing House, 66, 140, 200.
  money, 1, 23.
Banking Department of the Bank of England, 94.
  principle of note regulation, 73, 93.
  statistics, 100.
  system, English, 77–102.
Barter, credit is deferred, 64, 103.
Big Five, 100.
Bill of lading, 84.
Bills of exchange, 71–3, 103–8.
Bimetallism, 41–54.
  international, 54.
Blackett's memorandum, 158.
Bland Act, 51, 168.
Brassage, 32.
Brussels Conference, 171.
Bullion Committee, 91.
Bullion, exports and imports of, 114, 135.
  in the Bank of England, 94.

Call money, 82, 84, 112, 123.

Capital, bankers', 75.
  government restrictions, 130, 208, 224.
Cash at Bank of England, 84, 100.
Cassell, Gustav, 171.
Central banks, 54, 75, 185, 199.
Cheap money, 69, 200, 215, 223.
Circulation, 97, 164, 183, 228.
Classification of Money, 24.
Clearing Banks, 67, 100, 200, 235.
  cash percentage, 147, 201, 224.
  30:70 ratio, 235.
Clearing House, 66, 140, 200.
Closed economy, 222.
Closing of the mints to silver, 44–52.
Coinage, 6–14, 27–40.
  silver, 168, 180.
Commercial Bills, 68.
Continental Banks, 122.
  Stock Exchanges, 117.
Conventional paper money, 56.
Convertible paper money, 56, 59.
Cost of production and War prices, 143.
  of gold, 9, 12, 166.
Country clearing, 67.
Credit, 24, 63–76.
  and confidence, 63, 113, 237.
  and deflation, 158, 200.
  and gold, 141, 239.
  and inflation, 146, 161.
  failure of, 113, 121.
  gold bottle-neck of, 141.
  volume of, 142, 161, 200.
Crisis, financial, 111–32.
  of 1914, 116.
  of 1931, 190,
Cunliffe Committee, 157, 163, 183, 199.
Currency, 24.
  and gold, 25.
  volume of, 145, 202.
Currency Notes, 72, 102, 124, 165, 179, 183.
  and inflation, 144, 150, 159.
  Investment Reserve, 163.
Currency principle of note regulation, 74, 92.
Current accounts, 65, 69, 100, 202.

Dawes Plan, 173, 189.
Dear money, 158, 175, 200.
Debt extinction, 175.
  floating, 151, 158.
Deflation, 157, 200.
Deposits, 68–70, 100, 146, 158, 202, 224.
  in Bank of England, 79.
  pyramiding, 146, 158.
  rate of interest, 70, 112, 236.
Discount houses, 82, 85, 102, 119, 122, 129.
Discounts, 68, 70, 83, 111, 201, 235.
Document of title, 71.
Double standard, 42–53.
Drains on the reserve, 97.
Durability of gold, 9.

Earmarking gold, 62, 216, 239.
Economics, definition of, 1.
Economist Index Nos., 20, 155.
Effective gold standard 31.
Egypt early coins in, 13.
England and Monometallism, 44.
  balance of trade, 173.
  early currency history, 29, 43.
  foreign loans, 136, 193.
  opposition to Bimetallism, 52.
English banking system, 77–102.
Exchange, 1–8.
  rate of, 103–109.
  value, meaning of, 1.
Exchange Equalization Fund, 99, 215–40.
Exchanges, foreign, 103–110, 166.
  Indian, 49, 169.
  paper, 106, 171.
  silver, 106.
Exports, 128, 173.
  and the war, 128.
  invisible, 173.
  volume of, 134, 173.

Failure of credit in a crisis, 113, 121.
Federal Reserve system, 212, 228, 231.
Fiduciary paper money, 56.
Fiduciary Issue, 179, 183, 231, 233.
Finance bills, 73.
Financial crisis, 111–32.
  July 1914, 116.
  1931, 189–93.
Floating debt, 151, 158.
Food panic, 126.

Fordney Tariff, 172, 187.
Foreign Bills, 103–10.
  discounts, 85, 122.
Foreign exchanges, 103–10, 119, 137, 166–74, 207.
Foreign trade, *see* International.
France and Bimetallism, 44, 52.
  and the gold standard, 177, 222.
  as a financial centre, 189.
  devaluation in, 222, 232.
  gold holdings, 191, 211.
  stabilization, 191.
Free gold (U.S.A.), 213, 218.
Free mint for gold, 28, 176.
  not for silver, 38.
  not gratuitous, 32.
French credits, 191, 192, 208.
  note issue, 95, 211.
Functions of Money, 5–14.

German exchanges, 138, 174, 178.
  mark debacle, 174, 178.
  note issue, 95.
  reparations, 174, 185, 189, 214.
  thalers, 46.
Germany and Austria, 189.
  American Loans, 188.
  and the War crisis, 117.
  closed economy, 222.
Giffen, Sir Robert, 121.
Gold: 24–32.
  against note issue, 94, 164, 183.
  and credit, 141, 239.
  Bank's price for, 33, 176, 209, 234.
  bottle-neck of credit, 141.
  bullion standard, 31.
  coinage of U.K., 30, 44.
  cost of production, 9, 12, 166.
  dehoarding, 209.
  depreciation of, 45.
  discoveries, 44, 52.
  early forms of money, 13.
  exchange standard, 207, 210.
  exports, 157, 166, 178.
  free mint for 28, 176.
  from India, 209.
  imports during the War, 136.
  in Bank of England, 94, 191, 230.
  in Germany, 46.
  Market price, 32.
  Mint price of, 28, 31, 90, 176.
  mobility of, 239.
Gold (*cont.*)—
  points, 108.
  price of, 28, 31, 90, 229, 234.
  production, 10, 199, 204, 209.
  revaluation of, 234.
  shipments to U.S.A., 136, 167.
  supply and prices, 141, 161.
  supply, Committee on, 166.
  value of, 34.
  world's stock, 9, 10, 199, 210.
  1663 Act, 29.
Gold bloc, 222.
Gold scare, 229, 231.
Gold Standard, English, 30, 105, 165.
  French, 42, 105.
  suspension, 98, 167, 194.
Gold Standard Act, 1925, 176, 181.
Goldsmiths, 70, 88.
Gratuitous coinage, 32.
Greek coins, 13.
Gresham's Law, 35–53, 60.
Guinea, history of the, 30.

Hawley-Smoot Tariff, 1930, 204.
Hoarding, 38, 212.
Hot money, 228.

Imports, 104, 128, 173.
  invisible, 173.
  volume of, 134.
Index numbers, 20, 139, 155, 173, 197.
India and silver, 48, 169, 220.
  absorption of gold, 53.
  closing of mints, 49.
  debt charges, 49.
  foreign exchanges, 49, 169.
  gold exports, 209.
  gold production, 8.
  silver from U.S.A., 168.
Industries and the War, 127.
Inflation, 144–57, 219.
Insurance commissions, 137.
International Bimetallism, 54.
International trade, 103, 133.
Intrinsic value, 6.
Invisible exports and imports, 136, 173.
Issue Department, 94, 231–3.

Joplin, Thomas, 91.

Latin Union, 45, 52.
Lausanne Conference, 214.
League of Nations Gold Report, 204.
Legal tender, 14, 27.
  bank notes, 72, 179.
  Currency notes, 124, 179.
  of silver, 39, 44.
Loans, abroad, 136, 193.
Lombard Street, 78, 81–7, 101, 113, 117.
  and the War, 118, 122, 129.
London Course of Exchange, 105, 138.
Long rate of exchange, 106.

Macmillan Committee, 100, 190.
Marine insurance, 126, 128, 137.
Market price, 126.
May Committee, 191.
Mercantilists, 29, 108.
Metropolitan Clearing, 67.
Mint, Bank of England, and the, 33, 79, 176.
  closed to silver, 43, 47, 49.
  free, 28, 176.
  gratuitous, 32.
  par of Exchange, 106, 172.
  price of gold, 31, 176.
  price of silver, 34.
Money, 1–27, 139.
  and prices, 15, 22, 139.
  bankers', 1, 23.
  classification of, 24.
  functions of, 5–14.
  legal tender, 14, 27.
  mobility of, 112.
  paper, 23, 55–62.
  platinum, 9, 11.
  qualities of standard, 27.
  quantity of, 24.
  Quantity Theory of, 15, 22, 139.
  rapidity of circulation, 24.
  strong, weak and right, 27.
Money Market, 78, 81–7, 102, 111, 118–29, 140, 224, 234.
Money's work, volume of, 25, 142, 145, 152.
Monometallism, *see* Bimetallism.
Moratorium, 124, 130.
  American, 190, 214.

National Defence Contribution, 229.
National income, 152.
Neutrals and the War, 136.
New Deal, 220, 231.
New issues control, 130, 208, 224.
New York stock exchange, 187.
Note gold, 180, 183.

Offa's silver penny, 29.
Open Market purchases, 223.
Other Banks, 77, 81, 83, 99, 112, 123, 148, 223.
  statistics, 99.
Outside Money Market, *see* Lombard Street.

Paper exchanges, 106, 171.
Paper money, 24, 55–62.
Paterson, William, 88.
Pegging of the exchanges 136, 138, 167.
Pittman Act, 168.
Platinum money, 9, 11.
Portability of gold, 9.
Post-Armistice slump, 155.
Post-war boom, 155–62.
Precious metals, 6–12.
Premium on gold, 60.
Prescription, 72.
Price and value of commodities, 1.
  of gold, 34, 209, 229.
  of silver, 34, 168.
Prices and the quantity theory, 15–26, 139–55.
  effect of changing, 21.
  history of, 20, 47, 127, 155, 195, 208.
  paper money and, 57.
  retail, 127.
  War, 143.
  wholesale *v.* retail, 196.
Private banks, 77, 89, 102.
Private note issues, 94, 102.
Produce exchanges, 119, 130.
'Proportion', 97, 157.
Protection, 192, 209.
Provincial Clearing Houses, 67.
Public departments, securities in, 225.

Purchasing Power Parity, 170–5, 178.
Pyramiding of deposits, 146, 158.

Quantity theory of money, 15–26, 139–62.
  and Bimetallism, 41.

Rapidity of circulation, 24.
Rate of exchange, 103–9, 137, 167, 171, 175, 178, 207.
  and the War Crisis, 119.
  during the War, 130, 138.
  effect of depreciated paper on, 60, 106, 171.
  in India, 49, 169.
Rates of interest, 69.
Ratio between gold and silver, 42.
Rearmament, 228, 236.
Recoinage of 1601, 30.
  1663, 30.
  1696, 31.
  1816, 32.
Reflation in U.S., 211.
Register of debt, 6.
Relative prices, U.K. and U.S.A., 178, 208.
Reparations, 185, 214.
Representative paper money, 56.
Reserve, Bank of England, 96, 98.
  and the Money Market, 96, 140.
  during 1914 crisis, 120.
  in a crisis, 113.
  proportion to liabilities, 97, 157.
Right money, 27.
Rupee, 48, 169.
Russia, 9, 177, 229.

Seigniorage, 32.
Sherman Act, 51, 168.
Shipping, 137, 173.
Short Loan Market, 83.
Short rate of exchange, 106.
Silver, American legislation, 51, 168, 219.
Silver, 29, 33–54, 169, 220.
  against bank notes, 94, 179.
  against currency notes, 163.
  exchanges, 106.
  price of, 34, 168.
  standard, 29, 169.
  world's supply of, 35, 45.
Sovereign, 32, 34.
Standard of deferred payments, 5.
  value, 1–3.
Sterilizing gold, 187, 227.
Sterling standard, 32.
Stock exchange and the War, 117, 122, 130.
  in a crisis, 118.
Store of value, 5.
Strong money, 27.
Suspension of cash payments, 43, 80, 90, 194, 207.
  of the Bank Act, 115, 124.
  of the gold standard, 98, 167.

Tariffs, 172, 187, 209.
Token money, 24, 39.
  and the quantity theory, 25, 142.
Town clearing, 67.
Trade cycle, 196, 238.
Trade returns and the War, 134.
Transport during the War, 125.
Treasury Bills, 68, 151, 159, 235.
  notes, *see* Currency notes.
Tripartite Agreement, 222, 227.

Unemployment Committee, 191.
United States and the gold standard, 218.
  and the War, 135, 187.
  bank failures in, 211.
  Capital Gains tax, 229, 231.
  deflation in, 158.
  Federal Reserve notes, 213.
  Federal Reserve system, 212.
  gold clause, 219, 221.
  gold embargo, 218.
  gold holdings, 199, 211.
  gold scare, 229, 231.
  gold shipments to, 167.
  hoarding in, 212.
  hot money, 228.
  New Deal, 220, 231.
  Pump priming, 228.
  Reflation, 211.
  R.F.C., 212, 217.
  relative prices, U.K. and, 172, 175, 178, 208.
  State banks, 213.
  sterilizing gold, 227.

United States (*cont.*)—
  Undistributed Profits Tax, 229, 231.
Universal third commodity, money, 1.

Value and prices, 3, 18, 21.
  of money, 16, 18.
  of silver, 34.
Volume of foreign trade, 173.

Wall Street crash, 212.
War Debts, 214, 220.
Ways and Means Advances, 82, 151, 158.
Window dressing, 100.
World Economic Conference, 215, 220.

Young Plan, 185.

PRINTED IN GREAT BRITAIN AT THE UNIVERSITY PRESS, OXFORD
BY JOHN JOHNSON, PRINTER TO THE UNIVERSITY